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3.1 INTRODUCTION

Commodities are the basis of trade. It is the tendency of pests/diseases to associate with commodities as hitchhikers. Agricultural commodities are inspected to ensure that shipped commodities are free from unwanted pests and eligible for trade.

The “Terminal Inspection Act” of 1915, amended in 1936, allows states to inspect plants and plant products that are being shipped into their territories. The CDFA’s Pest Exclusion Program enforces state exterior and interior quarantines. The Program also enforces federal domestic, foreign, and territorial quarantines, and county restrictions. At air and maritime ports, agricultural officials from federal, state and/or county inspect arriving aircraft, vessels, luggage and cargo following procedures outlined in a Memorandum of Understanding (MOU) between CDFA and the County Agricultural Commissioners. Shipments that are found to be in violation of quarantines and/or the Food and Agricultural Code are rejected, treated and released or destroyed.

Rapid transportation systems had made expediency be the norm. Agricultural commodities such as cut flowers and fruits, shipped from other states or countries that may be infested with exotic pests, can arrive fresh in California within hours. Such commodities are subject to agricultural quarantines. In order for the quarantine to be effective, the commodity must be held for agricultural inspection. A cooperative working relationship exists among federal (USDA), state (CDFA) and counties (CAC), working separate, complimentary, or shared areas of responsibility. Generally, USDA focuses on foreign pests at international ports of entry, and foreign markets, while CDFA and CAC are more involved in interstate and intrastate exclusion activities/issues.

The CDFA’s pest exclusion and CAC network currently enforces 26 state exterior quarantines, 16 state interior quarantines, 23 federal domestic quarantines, several federal foreign and federal territorial quarantines, as well as 8 county ordinances.

The CDFA Pest Exclusion Program is divided into Interior, Exterior, Nursery/Seed Services Programs. The Interior Pest Exclusion Program enforces federal foreign and domestic plant pest quarantines as well as California state exterior and interior quarantines; and county restrictions and ordinances. Exterior exclusion consists of 16 state border stations located at major highway points of entry throughout the state and inspect private and commercial vehicles. The Nursery and Seed Services Program ensures high quality of planting material and fiber.

3.2 QUARANTINE PEST RATING SYSTEM

I. GENERAL PRINCIPLES

Section 403 of the California Food and Agricultural Code mandates that, "The department shall prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds." This statutory duty requires a pest policy that recognizes that organisms vary as to their potential and actual harm to California's agriculture and environment. Overall pest significance is the basis for determining what pest prevention activities are appropriate, at what level, and when and where those activities should be conducted.

1. [Pest ratings](#) are intended as aids to inform county agricultural commissioners and other interested persons as to a particular pest's environmental, agricultural and biological significance, as well as its importance to the general public, and the action recommended by the Department to deal with the pest.
2. Each pest rating represents the Department's view of the statewide importance of the pest to the agricultural, horticultural, forestry and public health interests of California. Local conditions may dictate more stringent action against the same pest in individual counties at the discretion of the county agricultural commissioner.
3. It is the Department's policy to use the "Action Oriented Rating System". Pest ratings represent the Department's policy governing what action is to be taken consistent with existing statutes. This include authority for:
 - a. Promulgation of quarantine, eradication, control, standards of cleanliness, and other regulations
 - b. Holding and inspection, establishing host-free, weed-free, and special pest control districts
 - c. Other regulatory activities

II. ACTION ORIENTED RATING SYSTEM DEFINITIONS

"A" An organism of known economic importance subject to state (or commissioner when acting as a state agent) enforced action involving: eradication, quarantine regulation, containment, rejection, or other holding action.

"B" An organism of known economic importance subject to: eradication, containment, control or other holding action at the discretion of the individual county agricultural commissioner.

Or

An organism of known economic importance, subject to state endorsed holding action and eradication only when found in a nursery.

"C" An organism subject to no state enforced action outside of nurseries except to retard spread. Regulations are at the discretion of the county agricultural commissioner.

Or

An organism subject to no state enforced action except to provide for pest cleanliness in nurseries.

"Q" An organism or disorder requiring temporary "A" action pending determination of a permanent rating. The organism is suspected to be of economic importance but its status is uncertain because of incomplete identification or inadequate information.

In the case of an established infestation, at the discretion of the Plant Health and Pest Prevention Services Director, the department may conduct surveys and may convene the Division's Pest Study Team to determine a permanent rating.

"D" No action (parasites, predators, and organisms of little or no economic importance).

III. PROCEDURE FOR ESTABLISHING NEW RATINGS

1. A specimen/sample is received by CDFA's Plant Pest Diagnostic Laboratory and an unrated organism is identified. The identifier, because of incomplete identification or insufficient information, may assign a "Q" rating if the organism is believed to be of economic importance, documenting the reason(s) for the rating.
2. If the organism is of no economic importance or beneficial, the identifier may assign a "D" rating. No further action is required.
3. To assign a permanent "A", "B", or "C" pest rating, the identifier presents supporting documentation to the appropriate primary state professional, and they reach an agreement on a proposed rating.
4. The Branch Chief of Plant Pest Diagnostic Laboratory is then notified in writing, by the primary state professional of the proposed rating and reasons why the rating was selected.
5. The Branch Chief of Plant Pest Diagnostic Laboratory notifies the Assistant Director of Plant Health and Pest Prevention Services and the Division's Branch Chiefs of the proposed "A", "B", or "C" rating and the reasons supporting the proposed rating. If there are no valid objections within two weeks, the Branch Chief of Plant Pest Diagnostic Laboratory will assume concurrence and notify County Agricultural Commissioners of the proposed rating. The rating is established 30 days later if no adverse comments are received and there is no request for a formal meeting of the appropriate Division Pest Study Team.
6. Other state agencies, such as Fish and Game, Health and Forestry, will be consulted regarding their position on proposed ratings for those organisms involving their regulatory or public responsibilities.
7. If any adverse comment was received, the identifier and appropriate primary state professional will refer the comments to the Division's Pest Study Team and/or the Assistant Director for resolution, if necessary. A request

for a formal meeting of the Division Pest Study Team is to be accompanied by the reasons/supporting data for the request.

8. The Division Pest Study Team, if convened, will recommend a pest rating to the Assistant Director, Plant Health and Pest Prevention Services.
9. The Branch Chief of Plant Pest Diagnostic Laboratory will issue the "Important Notice" of the assigned rating.
10. The "Q"-rating of all pests known to be established in California are reviewed every March by the primary state professionals to determine if the "Q" status should be continued or if a permanent rating should be proposed. A written report on each review will be prepared and sent to the Branch Chiefs and the Assistant Director. Any proposed permanent rating will be handled as outlined in steps 4 through 8.
11. If the Director determines that an unrated pest poses a major threat to California's agriculture or environment, the Director's Statement of Findings regarding that pest supercedes this document.

IV. PROCEDURE FOR CHANGING ESTABLISHED RATINGS

1. Any interested person may recommend a change in an established rating by submitting a request to the Assistant Director, Plant Health and Pest Prevention Services. The Assistant Director will refer the request to the appropriate primary state professional.
2. To change an "A", "B", "C", or "D" pest rating, the person proposing the change presents supporting documentation to the appropriate primary state professional, and they reach agreement on the proposed rating change.
3. The Branch Chief of Plant Pest Diagnostic Laboratory is then notified in writing by the primary state professional, of the proposed rating change and reasons why new rating was selected.
4. The Branch Chief of Plant Pest Diagnostic Laboratory notifies the Assistant Director of Plant Health and Pest Prevention Services, and Division Branch Chiefs of the proposed rating change and reasons for it. If there are no valid objections within two weeks, the Branch Chief of Plant Pest Diagnostic Laboratory will assume concurrence and notify County Agricultural Commissioners of the rating change. The new rating is established 30 days later if no adverse comments are received and there is no request for a formal meeting of the appropriate Division Pest Study Team.
5. Other state agencies, such as Fish and Game, Health, and Forestry, will be consulted regarding their position on proposed rating changes for those organisms involving their regulatory or public responsibilities.
6. Adverse comments, if any, will be reviewed by the appropriate primary state professional. If necessary, the comments will be referred to the Division Pest Study Team and/or the Assistant Director for resolution. A

request for a formal meeting of the Division Pest Study Team is to be accompanied by the reasons/supporting data for the request.

7. The Division Pest Study Team, if convened, will recommend a pest rating to the Assistant Director, Division of Plant Health and Pest Prevention Services.
8. The Branch Chief of Plant Pest Diagnostic Laboratory will issue the "Important Notice" of the new assigned rating.

V. CDFA PLANT PEST RATINGS

- ◆ [Invertebrates](#)
- ◆ Pathogens/Diseases
 - i. [Bacteria](#)
 - ii. [Fungi](#)
 - iii. [Nematodes](#)
 - iv. [Viruses, virus-complexes](#)
- ◆ [Vertebrates](#)
- ◆ Weeds
 - i. [Noxious Weeds](#)
 - ii. [Weed Policy](#)

RELATED LINKS

[Federal Noxious Weed List, USDA](#)
[Integrated Pest Control Branch, CDFA](#)
[Invasive Species Search](#)

3.3 PHYTOSANITARY CERTIFICATIONS

The United States is a member of the International Plant Protection Convention (IPPC). This convention was designed to provide international cooperation in preventing the spread of plant pests and diseases across international boundaries. The convention prescribes a standard form for plant protection/phytosanitary certificates. Each contracting government also agrees, to the best of its ability, to make provision for the issuance of certificates only under conditions that make such certificates dependable documents.

In a nutshell, the goal of this program is to insure that the pest cleanliness of the commodity meets the minimum standards of the importing country.

It is incumbent on the certifying inspector to ascertain the plant quarantine import requirements of the destination country for each shipment. This will include examination of the import permits, if available. Before issuing a phytosanitary certificate, s/he must determine that the shipment qualifies, and that it conforms to the wordings of the certificate.

PHYTOSANITARY REQUIREMENTS

Inspection for export certification is made to determine whether plants or unprocessed plant products intended for export comply with the phytosanitary import requirements of the destination country. Inspectors conducting the inspection should be fully informed as to the requirements of the destination country by reference in EXCERPT* of that country's plant quarantine requirements or other available official information. Where import permits are required, the specific conditions of entry are usually stated on the permit. For more detailed information please refer to the "Export Certification Manual" in your office.

Chronological or electronic records should be maintained for each certificate at the county office.

Referring to Sections 5201 through 5208 of the California Food and Agriculture Code, no fees shall be charged for a certification required by law. However, each county usually establishes a schedule, and charges for any service, work, travel, overtime or related service.

*EXCERPT, is the acronym for Export Certification Project, is a computerized database containing the Phytosanitary certification requirements of many countries. EXCERPT is available online to subscribers or via dial-up modem. For more information about EXCERPT call (764) 494-4967.

CERTIFICATION OF SEEDS

FIELD INSPECTION PROGRAM

Persons or firms desiring phytosanitary certification of seed to countries or states requiring field inspections during the

growing crop should apply for the inspection through the California Department of Food and Agriculture, Pest Exclusion office. Upon acceptance, Pest Exclusion will issue a serial number to each application, and send copies of the application to the applicant and to the appropriate County Agricultural Commissioner's office.

Pest Exclusion staff will review the phytosanitary requirements of the receiving company. Applications for phytosanitary field inspections of seed may be denied if the receiving country has officially published any requirements for the commodity.

Applicant Responsibility

Applicant must comply with the following conditions when submitting applications:

- 3 Communication must be maintained with the County Agricultural Commissioner prior to submitting the application. Applicant shall work closely with the commissioner and with the grower regarding harvesting, seed separation, and pesticides. The grower or the seed company representative shall contact the commissioner and schedule dates for inspection. A field cannot be inspected if it is being irrigated, or if entry is prohibited because of pesticide treatments.
- 4 Application must be submitted to the Pest Exclusion office prior to or at time of planting. Failure to submit application on time may result in rejection of application. Plants may be too mature to inspect for diseases of concern or commissioner's office maybe unable to adjust workload to inspect on short notice.
- 5 Applicants should submit original and two copies of application for "Phytosanitary Field Inspection of Seed" [Form 66-085](#) to:

**Department of Food and Agriculture
PEST EXCLUSION BRANCH
1220 N Street, Suite A-372
SACRAMENTO, CA 95814**

It is recommended that the seed company send a copy of the application to their local representative.

4. When required by the county agricultural commissioner, the applicant must supply a satisfactory map locating the seed field, either on or with the application.
5. All problems relating to field inspection, including late applications, failure to notify county commissioners of time to inspect, inability of inspector to enter field due to irrigation or pesticides, etc., must be resolved by communications between the applicant and the county commissioners.
6. Pest Exclusion lists plant pathogens of phytosanitary concern based on the best information available from official agencies. The seed company should check this list to determine that includes all diseases of concern to their customer. If there are diseases of concern not on the list, the seed company must submit a copy of the import permit or regulations from the importing country verifying that inspection for or freedom from the disease is an official request from the regulatory agency of the

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importing country.

7. Applicants requesting field inspection for new disease to meet foreign seed company's requirement should confirm with the foreign regulatory agency prior to submitting inspection request to the state.
8. Upon receiving the copy of application, the applicant shall identify each field or plot to be inspected with a suitable stake or placard bearing the serial number assigned by Pest Exclusion. This identification shall be maintained during the growing season.

Results of Field Inspection

The record of field inspection will indicate all phytosanitary significant pathogens found that are listed by Pest Exclusion.

INSPECTIONS FOR SEED MOVEMENT

Responsibility of the Applicant

The assigned serial number must be maintained on all containers during harvest, processing, and after placement into bags or containers.

Prior to moving any lot of seed for processing and/or from one location to another, including interstate, the applicant shall immediately notify the agricultural commissioner of the county from which the seed is to be moved.

Responsibility of the County/State

To maintain identity of seed when it is to be moved from one county to another, the agricultural commissioner at origin shall send copies of the record of field inspection to the consignor, consignee, and the agricultural commissioner at destination.

Seed bearing assigned serial numbers and meeting the requirements of the destination county are eligible for export certification by Plant Quarantine Officers.

CERTIFICATION OF SEEDS TO OTHER STATES OR COUNTRIES:

If requested, Form 66-088 "Inspection Report" may be issued as an addition to either the Federal or State Phytosanitary Certificate.

Bean Seed to Idaho:

Issue [Form 66-095](#) "Bean Field Inspection Report". One copy must accompany the shipment and one copy is to be given to the seed company.

Identification Numbers Assigned to California Counties

The county identification number will be used when assigning a serial number to the Phytosanitary Field Inspection application. The first two digits of the serial number will identify the county of origin. The next four digits will be the production year. The remaining digits will identify the order in which the number were assigned for that county that year.

Example: 012004001

County	Number	County	Number
Alameda	01	Orange	30
Alpine	02	Placer	31
Amador	03	Plumas	32
Butte	04	Riverside	33
Calaveras	05	Sacramento	34
Colusa	06	San Benito	35
Contra Costa	07	San Bernardino	36
Del Norte	08	San Diego	37
El Dorado	09	San Francisco	38
Fresno	10	San Joaquin	39
Glenn	11	San Luis Obispo	40
Humboldt	12	San Mateo	41
Imperial	13	Santa Barbara	42
Inyo	14	Santa Clara	43
Kern	15	Santa Cruz	44
Kings	16	Shasta	45
Lake	17	Sierra	46
Lassen	18	Siskiyou	47
Los Angeles	19	Solano	48
Madera	20	Sonoma	49
Marin	21	Stanislaus	50
Mariposa	22	Sutter	51
Mendocino	23	Tehama	52
Merced	24	Trinity	53
Modoc	25	Tulare	54
Mono	26	Tuolumne	55
Monterey	27	Ventura	56
Napa	28	Yolo	57
Nevada	29	Yuba	58

GUIDELINES FOR PHYTOSANITARY FIELD INSPECTIONS OF SEED

Guidelines for Phytosanitary Field Inspections of Seed are based on:

1. Scientific knowledge available
2. Professional experience
3. Official requirements of the receiving countries that have been made available to us

Food and Agricultural Code Section 5205 mandates certification meeting the requirements stated in the laws and/or official import permits of the importing country. The validity of the requirements of the importing country is based on the best judgment of the officials of the importing countries. The jurisdiction for changing these requirements lies with the importing country even though some of these requirements, in effect, place an embargo on California grown seed.

The finding of one or more diseases, listed below under each crop, does not prevent the writing of a valid phytosanitary certificate provided the seed is going to a country that does

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not restrict the specific disease(s). For example: only one country expresses concern over *Diaporthe phaseolorum* on mother plants in pepper seed fields.

To accommodate seed companies who list "all countries" for "the state or country of destination" thus enabling market expansion after seed has been harvested, the requirements placed on vegetable seed were compiled using: USDA Manual 353-A 'Summaries of Plant Quarantine Requirements of Foreign Countries', quarantine regulations of other states, and the official import permits that were made available to this office.

Important Note

Should a seed company receive an official import permit listing either a disease or a crop other than those listed below, it is **the responsibility of the seed company** to forward these documents to the following address:

**California Department of Food and Agriculture
PEST EXCLUSION BRANCH
1220 N Street, Room A-372
Sacramento, CA 95814**

Only the official notices of importing states or countries give this office legal authorization to expend the time and labor necessary to provide training and training aids needed by county inspectors. Applications for inspection of crops not officially requiring inspection will be returned.

Records of applications and field inspections are maintained for three years after seed has been harvested.

The **inspection timing** and the **number of inspections** suggested for each crop listed below is considered adequate. It will not be necessary to inspect more often than the recommended number of times unless an unseasonable rain occurs after routine inspections have been completed. In the event of rain the field should be reinspected ten (10) days after the rain to confirm cleanliness.

The timing and frequency of inspections as listed is for furrow irrigated fields only.

FIELD INSPECTION POLICY AND PROCEDURES

Seasonal Employees

The use of seasonal employees for field inspections is acceptable to the USDA with the following provisions:

1. Seasonal employees are college graduates or are making satisfactory progress in major areas such as agronomy, botany, plant pathology or closely related areas.
2. The seasonal employees are required to have annual training prior to performing field inspections. Training should involve both classroom and field instruction by a qualified plant pathologist. If a qualified plant pathologist is not available with the county staff, please

contact CDFA Pest Exclusion or Pest Detection District Pathologist. Seasonal staff should not be used until they demonstrate they can competently identify symptoms and diseases caused by significant quarantine pathogens in the field.

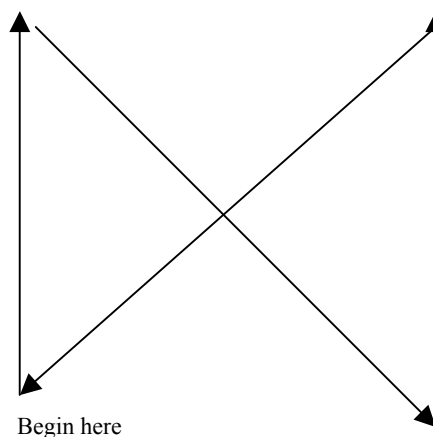
3. Field identifications need to be confirmed by a qualified plant pathology laboratory. Normally, the California Department of Food and Agriculture's Plant Pathology Laboratory in the Plant Pest Diagnostic Center in Sacramento will do the confirmation. Properly staffed and equipped county or Federal laboratories may also be used.
4. Seasonal employees must work under the supervision of a full-time, permanent county biologist.

Regular training in the detection of target pathogens is essential to maintain the quality of inspection regardless of the field pattern used. Annual employee refresher classes are encouraged. A pre-season class for seasonal employees is mandatory under USDA standards.

Field Inspection Walking Patterns

1. Cereal Crops

The pattern for walking cereal crops is similar to the letter X. Start in one corner of the field and inspect plants along one edge of the field. At the end of the field, diagonally cross through the center to the opposite corner. Then walk the edge of the field (opposite from where you started) to the corner. Finally, diagonally cross the field again to finish at the corner where you began.



Walking through the two edges of the field increases the probability of finding ergot along those edges that are adjacent to uncontrolled wild grasses and volunteer cereals during the third field inspection.

2. Other Crops

A statistical method is used to walk fields. The accuracy of this method is based on the number of plants observed

compared to the number of plants in the field. This method provides a minimum of 95% confidence in detecting an infection of 0.1%. In most crops, the confidence level will be greater than 95%.

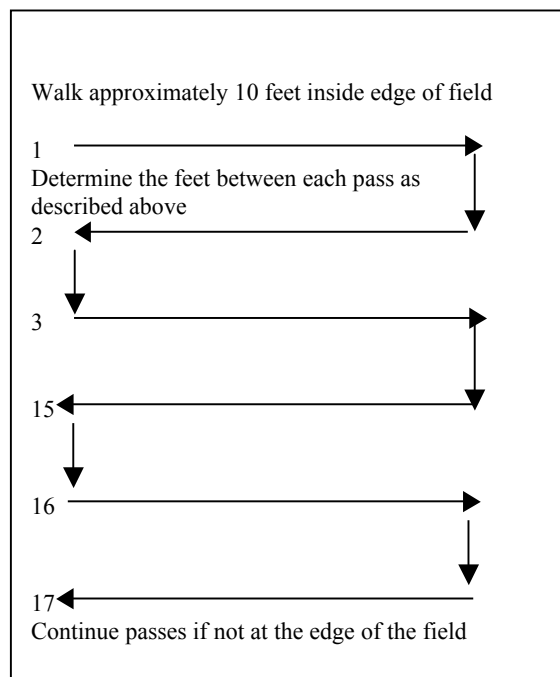
Statistical Method of Field Walking for non Cereal Crops

To determine how to conduct field inspections on crops other than cereals, inspectors must first know the number of acres in the field. This information is found on the application for phytosanitary field inspection of seed. Then, the inspector needs to determine the minimum number of passes required for each field using the chart below.

1. Select the minimum number of field passes from the table below based on the number of acres in the field. For example, a 30-acre field calls for a minimum of 17 passes according to our table.
2. Estimate the length of the field borderline. Figures should be close, but they do not need to be exact. (For this example, use 1,100 feet.)
3. Equally space the passes along a field borderline (1,100 feet/17 passes = 65 feet per pass.)
4. Walk the passes including the field borders at the end of the pass. If the last scheduled pass does not reach to the field border, continue to walk additional passes. When walking at the edge of the field, the inspector should walk approximately 10 feet inside the field to maximize the number of plants examined.

Minimum number of field passes for each field.

Acres in Field	Minimum Number of Field Passes
0-1.0	6
1.1-5.0	9
5.1-10.0	11
10.1-20.0	13
20.1-50.0	17
50.1-100.0	20
100.1-200.0	24
200.1-500.0	30
500.1-1000.0	36
1000.1+	42



CROPS, DISEASES, AND INSPECTIONS

ALFALFA

Two Inspections

1st - late winter or early spring.

2nd - late spring or early summer.

Walk every eighth row.

Inspect for:

Alfalfa dwarf (Pierce's disease)

Alfalfa mosaic virus

Aphelenchoides spp. bud and leaf nematodes

Ascochyta imperfecta - black stem

Botryotinia ciborioides - iris crown root

Cercospora medicaginis - black leaf spot

Corynebacterium insidiosum - bacterial wilt

Cuscuta spp. - dodder

Ditylenchus dipsaci - stem nematode

Tomato ringspot virus

Typhula trifolii - clover snow mold

Urophlyctis alfalfae - wart

Verticillium albo-atrum - verticillium wilt

Xanthomonas campestris p.v. alfalfae - bacterial leaf spot

BARLEY

Two Inspections.

1st - tillering to preboot stage.

2nd - Head emergence into full bloom

Suggested walking pattern same as wheat

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Inspect For:

Anguina tritici - wheat gall nematode
Barley stripe mosaic virus
Cephalosporium leaf stripe
Claviceps purpurea - covered smut
Corynebacterium tritici - spike blight
Fusarium spp. - scab or head blight
Gaeumannomyces graminis var. *tritici* - take-all
Helminthosporium gramineum (*Drechslera graminea*) -barley stripe
Helminthosporium sativum (*Cochliobolus sativus*) -spot blotch
Helminthosporium teres (*Drechslera teres*) – net blotch
Heterodera avenae - oat cyst nematode
Hymenula cerealis (*Cephalosporium gramineum*) or black chaff
Pseudomonas atrofaciens - basal glume rot
Pseudomonas syringae - bacterial leaf blight
Punctodera punctata - grass cyst nematode
Rhynchosporium secalis - scald
Septoria spp. - leaf and glume blotch
Ustilago nigra (*U. avenae*) -semi-loose smut
Ustilago tritici (*Ustilago nuda*) -true loose smut
Xanthomonas translucens - bacterial leaf strip

BEAN, Common, Adzuki, Mung

Three Inspections

1st - seedling - walk every eighth row (critical for halo blight).
2nd - mature vine with green pods - walk every eighth row.
3rd - windrow - walk every other windrow (for Idaho and Washington only).

Inspect for:

Bean Common Mosaic Virus
Bean southern mosaic virus
Colletotrichum lindemuthianum - anthracnose
Corynebacterium flaccumfaciens pv. *flaccumfaciens* - wilt
H. goettingiana - pea cyst nematode
Heterodera glycines - soybean cyst nematode
Pea enation mosaic virus
Pea seed-borne mosaic virus
Pseudomonas syringae pv. *phaseolicola* - halo blight
Pseudomonas syringae pv. *syringae* - brown-spot blight
Tobacco ringspot virus
Tomato ringspot virus
Virus diseases transmitted by seed
X. phaseoli pv. *fuscans* - fuscous blight
Xanthomonas campestris pv. *phaseoli* – common bacterial blight

BEAN, LIMA

Two Inspections

1st -Seedling-walk every eighth row (critical for halo blight).
2nd -Mature vine with green pods-walk every eighth row.

Inspect for:

bacterial blight.
Bean western mosaic virus (= strain of bean
C. lindemuthianum - bean anthracnose
Colletotrichum dematium f. *truncatum*-lima bean anthracnose common mosaic virus).
Corynebacterium flaccumfaciens pv. *flaccumfaciens* - wilt
Elsinoe phaseoli - lima bean scab
P. s. pv. syringae - brown spot blight
Pseudomonas syringae pv. *phaseolicola* - halo blight
X. phaseoli pv. *fuscans* - fuscous blight
Xanthomonas campestris pv. *phaseoli* - common

BROADBEAN (Fava Bean)

Two Inspections

1st - when plants are in early pod stage - walk every eighth row.
2nd - when pods are beginning to mature - walk every eighth row.

Inspect for:

*vetch; broadbean
Ascochyta fabae - Ascochyta blight of pea,
Broadbean Mottle Virus - broadbean mottle
Collectotrichum villosum-anthracnose on vetch
Corynebacterium flaccumfaciens pv. *flaccumfaciens*-wilt of bean
Ditylenchus dipsaci - stem and bulb nematode
Orobanche spp. – broomrape
Peronospora viciae - downy mildew
Pseudomonas syringae pv. *pisi*-bacterial blight
Xanthomonas phaseoli-common blight of bean

Note on *D. dipsaci*, oat strain (present in California) attacks vetch in Europe. Watch for tulip root disease on oat.

* Reported on designated host (vetch or broadbean) in California.

BEETS - (Beet, Sugarbeet, Mangel, Swiss Chard)

One Inspection - in spring when plants begin to bolt-walk every sixth row.

Inspect for:

* Beet Yellow Virus - beet yellows
* *Peronospora effusa* (= *P. schachtii*) - downy
* *Pseudomonas syringae* pv. *aptata* - bacterial
* Rhizomania disease
blight
Cercospora beticola
Colletotrichum dematium f. *sp. spinaceae*
Corynebacterium flaccumfaciens pv. *Betae*-silvering disease of beet
Ditylenchus dipsaci - stem and bulb nematode
mildew
Phoma betae (= *Pleospora bjorlingii*)-black rot
Pseudomonas aptata
Tomato Black Ring Virus - tomato black ring, black rot

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Verticillium dahliae

* Viruses in general

A genetic disorder - Family 41 yellows of sugarbeet

* In California on *Beta vulgaris*

CARROT

One inspection in bud, just beginning to flower, tops still green.

Inspect for:

Alternaria dauci - leaf blight

Alternaria porri

Alternaria radicina - (= *Stemphylium radicinum*) black rot, root rot

Xanthomonas campestris pv. *carotae* - bacterial blight

CELERY

Inspect for:

Septoria apiicola - celery late blight

CHICORY - Endive; Salsify

Inspect for:

Marsonia panattoniana - anthracnose

Ustilago cichorii - smut

CORN

Two Inspections

1st-two weeks prior to through three weeks after tassel emergence.

2nd-after pollination, when silks are dry and kernels have become fully developed and just begin to harden.

Walk around each planting and make one pass through the field at each inspection.

Inspect for:

All viruses and virus-like diseases

Cephalosporium maydis - late wilt

Claviceps gigantea - ergot, diente de caballo

Cochliobolus heterostrophus southern leaf blight

Corynebacterium nebraskense Nebraska bacterial wilt and leaf fleck

Diplodia macrospora - dry rot

Diplodia zeae (= *D. maydis*) - Diplodia stalk rot

Drechslera maydis (= *Helminthosporium maydis*,

Erwinia chrysanthemi

Erwinia stewartii (= *Xanthomonas stewartii*) - Stewart's disease

G. zeae - stalkrot

Giberella fujikuroi - stalkrot, pink ear

H. turcicum - northern leaf blight

Helminthosporium carbonum (= *Cochliobolus carbonum*)-

Helminthosporium leaf spot

Kabatiella zeae - eyespot

Leptosphaeria sp. - leafspot

Maize Dwarf Mosaic Virus (= Sugarcane Mosaic Virus,

Johnsongrass strain)-Maize dwarf mosaic

Peronosclerospora philippinensis

Peronosclerospora sorghi

Phyllosticta maydis - yellow leaf blight

Physoderma maydis - brown spot

Pseudoperonospora sorghi

Sclerophthora macrospora

Sclerophthora rayssiae var. *zeae*

Sclerospora maydis

Sclerospora maydis - Java downy mildew

Sclerospora philippensis-Philippine downy mildew

Sclerospora rayssiae var. *zeae* - brown stripe downy mildew

Sclerospora sacchari - sugarcane downy mildew

Sclerospora sorghi - sorghum downy mildew

Sclerospora spontaneum - spontaneum downy mildew

Sphacelotheca reiliana - head smut

Ustilago maydis - corn smut

COTTON

Only in Colusa and Yolo Counties

One inspection prior to end of the last complete cycle of vegetation

Inspect for:

Glomerella gossypii - cotton anthracnose

Xanthomonas campestris pv. *malvacearum* - bacterial blight

CRUCIFERS Cabbage, Cauliflower, Collards, Broccoli, Brussels Sprouts, Kale, Kohlrabi, Mustard, Turnip)

One inspection when plants begin to bolt - walk every sixth row.

Inspect for:

* *Alternaria brassicae* - alternaria gray leaf spot

* *Alternaria brassicicola* alternaria black leaf spot

* *Phoma lingam* (= *Leptosphaeria maculans*) black leg

* *Pseudomonas syringae* pv. *Maculicola*-pepper spot

* *Xanthomonas campestris* pv. *campestris* black rot

* In California on *Brassica oleracea*

CURCUBITS (Melon,Cucumber,Squash, Watermelon)

Two Inspections.

1st - during bloom and early fruit for virus

2nd - preharvest (mature fruit). Walk every sixth row for bush squash and watermelon, distance for other cucurbits; depends on density of crop.

Inspect for:

All/any significant bacteria

Acidovorax avenae subsp. *citrulli* - bacterial fruit blotch of watermelon.

Any/all significant viruses

Cladosporium cucumerinum

Collectotrichum lagenarium (= *C.obiculare*) anthracnose

Cucumber Green Mottle Virus (= Cucumber Aucuba Mosaic

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Virus)

Cucumber Mosaic Virus - cucumber mosaic

Dreschlera sorokiniana

Fusarium oxysporum f. sp. melonis

Fusarium oxysporum f. sp. *niveum* - fusarium wilt of watermelon

Muskmelon Necrotic Spot Virus

Mycosphaerella melonis (= *M. citrullina*, *Ditrymella bryoniae*, *D. melonis*) - gummy stem blight

Phoma citrullina

Physalospora rhodina - stem end rot of watermelon

Prunus Necrotic Ringspot Virus

Pseudomonas syringae pv. *lachrymans* - angular leaf spot

Squash Mosaic Virus (squash mosaic, muskmelon mosaic)

Watermelon Mosaic Virus (watermelon mosaic)

Xanthomonas cucurbitae - bacterial leaf spot

EGGPLANT

One Inspection at maturity of fruit - walk every sixth row.

Inspect for:

Eggplant (Brinjal) mosaic virus

Phomopsis vexans (= *Diaporthe vexans*) - Phomopsis blight

Potato Spindle Tuber Virus

LETTUCE

One or more (if necessary) inspections to see if a sufficient number of plants at the proper stage are infested. When plants begin to visibly bolt (i.e. stem elongation or pushing) prior to branching, walk every eighth row. If mosaic is found, estimate the percentage of mother plants infested and record this figure on the field inspection report.

Inspect for:

Lettuce yellow mosaic virus

Pseudomonas chicorii

Septoria lactucae

Tomato spotted wilt virus

Xanthomonas campestris pv. *vitiensis*

Some countries allow for maximum of 0%, 1%, or 2% infected mother plants by lettuce mosaic virus (in the seed field).

OATS

Two inspections.

1st - tillering to preboot stage.

2nd - head emergence to full bloom.

Inspect for:

Barleystripem

Drechslera victoriae (= *Helminthosporium victoriae*) - victoria blight

ONION (Onion, Shallot, Garlic, Leek, Chive)

One Inspection

For seed production, walk every eighth row.

Timing - About 50% in flower until green seed form, while plants are still green and vigorous.

For Bulbs - Walk every eighth row; however, if field contains many varieties planted in less than eight rows, walk every variety. Time inspections after bulbs form but while tops are still green and vigorous.

For Consumption - Inspect the bulbs. Must certify product originates in county free of smut (*Urocystis cepulae*).

SPECIAL NOTE: When submitting samples to the diagnostic laboratory, please indicate the type of inspection (i.e., seed crop, commodities for Australia, seed-bulbs for Idaho) under "REMARKS" on the Pest and Damage Record, [Form 65-020](#).

Inspect for:

Alternaria porri - purple blotch

Botrytis alli, *Botrytis* spp. - grey mold neck rot

Colletotrichum circinans - smudge

Ditylenchus destructor - potato rot nematode

Ditylenchus dipsaci - onion bloat, eelworm rot

Fusarium spp.

Meloidogyne spp. - root knot nematodes

Onion yellow dwarf virus - yellow dwarf

Peronospora destructor - downy mildew

Puccinia asparagi - rust

Pyrenochaeta terrestris - pink root

Sclerotinia spp. - Sclerotinia rot

Sclerotium cepivorum - white rot

Urocystis cepulae (= *Tubercinia cepulae*) - onion smut

PEA

Two Inspections

1st - midpod set - walk every eighth row.

2nd - when plants are in senescent stage but before plants are dry

Inspect for:

Ascochyta spp. - Ascochyta blight

Corynebacterium flaccumfaciens pv. *flaccumfaciens* - bean wilt

Fusarium oxysporum f. sp. *pisi* - wilt

Orobanche spp. - broomrape

Pea Seed-Borne Mosaic Virus - pea fizzle-top, pea leaf-rolling, mosaic, pea seed-borne mosaic

Pseudomonas syringae pv. *pisi* - bacterial blight

PEPPER

Conduct one inspection at fruit maturity. Walk every sixth row.

Inspect for:

Colletotrichum acutatum

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Colletotrichum dematium
Corynebacterium michiganense pv. *michiganense* -bacterial canker
Diaporthe phaseolorum - fruit rot
Phytophthora capsici - Phytophthora blight
Cucumber mosaic virus
Pseudomonas solanacearum - bacterial wilt
Pseudomonas pustulens (= *P. syringae* pv. *tomato*) bacterial speck
Tobacco etch virus
Tomato spotted wilt virus
Xanthomonas campestris pv. *vesicatoria* - bacterial spot

POTATO

One Inspection.
For consumption - Inspect just prior to harvest.

Inspect for:

Phytophthora infestans A2 strain- potato late blight
A2 strain

RADISH

One Inspection. Inspect when plant flowers are first beginning to open.

Inspect for:

Alternaria brassicae
Alternaria brassicicola
Colletotrichum higginsianum - turnip anthracnose
Phoma lingam (= *Leptosphaeria maculans*) - root rot
X. campestris pv. *vesicatoria* - bacterial spot
Xanthomonas campestris pv. *campestris*
Xanthomonas campestris pv. *raphani* - black rot, bacterial spot

RICE

Two inspections.

Inspect for:

Alternaria padwickii - rice stackburn
Barley stripe mosaic virus
Rice hoja blanca virus
Xanthomonas campestris pv. *oryzae* - rice bacterial blight

SAFFLOWER

One Inspection. Inspect when plants are beginning to bloom.

Inspect for:

Fusarium oxysporum f. sp. *carthami*
Puccinia carthami - safflower rust
Septoria carthami - septoria leafspot

SORGHUM

Two Inspections.
1st - In the "boot" stage (after first three whorls but before it heads out)

2nd - "Head" or maturity stage.

Inspect for:

Colletotrichum graminicola - anthracnose
Giberella fujikuroi - stalkrot
Helminthosporium maydis (= *Cochliobolus heterostrophus*, *Drechslera maydis*)
Helminthosporium spp.
P. syringae - leafspot
Periconia circinata - Periconia root rot
Pseudomonas andropogoni - leaf stripe
Sclerospora philippinensis - downy mildew
Sclerospora sorghi - downy mildew
Sclerospora spontanea - downy mildew
Sclerospora spp. - downy mildew
Sphacelotheca spp. - smuts
Virus-like diseases
Xanthomonas campestris pv. *holcicola* - leaf streak

SOYBEAN

One Inspection. Inspect at midpod set.

Inspect for:

bacterial blight
bacterial pustule
Corynebacterium flaccumfaciens pv. *flaccumfaciens* - soybean bacterial wilt
Heterodera goettingiana - pea cyst nematode
Soybean budblight virus
Pseudomonas syringae pv. *glycinea* - soybean
Soybean mosaic virus
Xanthomonas campestris pv. *glycines* - soybean

SPINACH

Two inspections.
1st - Before flowering and before foliage canopy completely closes over rows.
2nd - After flowering and approximately 3 weeks before seed harvest.

Inspect for:

Colletotrichum dematium f. sp. *spinaceae* (leafspot)
Fusarium oxysporum
Verticillium dahliae

STOCK

One Inspection. Inspect when plants are in early stage of flowering.

Inspect for:

Cercospora insulana - statice leafspot
Xanthomonas incanae - black rot

SUNFLOWER

Two Inspections.
1st - During prebud formation (for virus)

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2nd - Full bloom through seed maturity stage

Inspect for:

Alternaria helianthi
Alternaria zinnia
Lasioptera murtfeldtiana - sunflower seed midge
Orobancha cernua (*O. cumana*) - broomrape
Phoma oleracea var. *helianthituberosa*
Phomopsis spp.
Plasmopara halstedii - downy mildew
Pseudomonas cichorii - bacterial spot
Pseudomonas helianthi (possibly *P. syringae*) -
Puccinia helianthi - rust
sclerotinia head rot
Sclerotinia sclerotiorum - sclerotinia wilt or
Seed-borne mosaic virus – sunflower Mosaic
Septoria helianthi - septoria leafspot
sunflower bacterial leafspot
Verticillium spp. - verticillium wilts
Virus diseases (any/all)

TOMATO

Two Inspections.

1st - bloom and young fruit - walk every sixth furrow

2nd - 20% to 30% fruit maturity, three to four weeks before harvest - walk every sixth furrow – be alert for spots on fruit.

Inspect for:

Arabias Mosaic Virus
Colletotrichum phomoides - anthracnose
Corynebacterium michiganense pv. *michiganense* -bacterial canker
Cucumber mosaic virus
Didymella lycopersici - Dickeyella stem and fruit rot
Fusarium oxysporum f. sp. *dlycopersici* – Fusarium wilt
Pepino Mosaic Potex Virus
Phoma distructiva - Phoma rot
Potato Spindle Tuber Virus - tomato bunchy top
Pseudomonas corugata
Pseudomonas punctulans
Pseudomonas syringae pv. *tomato* - bacterial speck
Tobacco Mosaic Virus - tobacco mosaic
Tomato big-bud MLO
Tomato Black Ring Virus - tomato black ring
Tomato bushy stunt
Tomato Ringspot Virus - tomato ringspot
Tomato Spotted Wilt Virus
Verticillium alboatrum v. *dahliae* - Verticillium wilt
Virus Diseases (all/any)
Xanthomonas vesicatoria - bacterial spot

VETCH

One Inspection

Inspect for diseases under broad bean when vetch is in full bloom and the oat nurse crop is headed out. Check oats for tulip root disease.

Inspect for:

Barley stripe mosaic virus
Claviceps purpurea - ergot
Tilletia secalis (*T. caries*) - rough spored bunt

WHEAT

Three Inspections.

1st - Tillering to preboot stage.

2nd - During bloom.

3rd - When seed head is mature.

Inspect for:

Alternaria sp.
Alternaria triticina - leaf blight
Anguina tritici - wheat gall nematode
Barley stripe mosaic virus
black chaff
Claviceps purpurea - ergot
Corynebacterium sp. - bacterial mosaic
Corynebacterium tritici - spike blight
Erysiphe graminis f. sp. *tritici* - powdery
Fusarium nivale - snow mold
Fusarium spp.
Gaeumannomyces graminis var. *tritici* - take all
Helminthosporium sativum - spot blotch
Helminthosporium spp.
Heterodera avenae - oat cyst nematode
Hymenula cerealis (= *Cephusporium gramineum*)
Cephusporium stripe
mildew
Neovossia indica - karnal bunt
Pseudomonas atrofaciens - basal glume rot
Pseudomonas syringae - bacterial leaf blight
Sclerophthora macrospora - crazy top
Sclerotinia sclerotiorum - sclerotinia wilt
Sclerotium rolfsii - southern blight
Selenophoma donacis - halo spot
Septoria spp.
Septoria stagonospora - glume blotch, wheat leaf
T. caries - common (rough spored) bunt
T. controversa - dwarf bunt
T. foetida - common (smooth spored) bunt
T. indica (*Neovossia indica*) - karnal bunt *Urocystis agropyri*
- flag smut
Tilletia spp. - bunts
Urocystis tritici flag smut
Ustilago spp.
Ustilago tritici (*U. nuda*) - loose smut
Xanthomonas translucens - bacterial stripe or

The suggested pattern for walking wheat fields is the Roman numeral X that starts and ends at the same corner of the field.

3.4 CONVERSION OF BULK COMMODITIES TO UNITS

To obtain uniformity in reporting plant quarantine inspections for the monthly, annual and other reports and validations, Agricultural Commissioners should use the conversion chart below to convert bulk commodities into units.

COMMODITY	UNIT	POUNDS
Alfalfa meal	Sack	100
Alfalfa seed	Sack	165
Apples (northwest)	Box	44
Bananas	Box	40
Barley	Car or Truck	
Beans (Castor)	Cwt	100
Beans (all dry)	Sack	100
Beans (green)	Bu	30
Broomcorn	Bale	333
Buckwheat	Cwt	100
Cantaloupe	Crate	80
Celery	Crate	60
Corn (Kaffir)	Car or Truck	
Corn (shelled)	Car or Truck	
Cotton	Bale	500
Cottonseed	Cwt	100
Flaxseed	Cwt	100
Grapes (table)	Lug	28
Grapes (wine)	Car or Truck	
Hempseed	Cwt	100
Milo	Car or Truck	

COMMODITY	UNIT	POUNDS
Oats	Car or Truck	
Onions (dry)	Sack	100
Peanuts (shelled)	Sack	120
Pears (northwest)	Box	46
Peas (green)	Bu	30
Peas (dry shelled)	Cwt	100
Popcorn (shelled)	Cwt	100
Potatoes	Sack	100
Potatoes (seed pieces)	Cwt	100
Potatoes (sweet)	Crate	50
Rapeseed	Cwt	100
Redtop seed	Cwt	100
Rice (polished & rough)	Cwt	100
Rye	Sack	130
Sorghum seed	Sack	125
Sudangrass seed	Cwt	100
Sweet Potatoes	Crate	50
Timothy seed	Cwt	100
Tomatoes	Lug	32
Tomatoes (Mexican)	Box	21
Vetch	Cwt	100
Wheat	Car or Truck	

3.5 APPROVING QUARANTINE MATERIAL HANDLING LABORATORIES

Section 3154 of Title 3 of the California Administrative Code authorizes CDFA's PHPPS Director to issue permits allowing movement into or within the State of articles and commodities otherwise prohibited by the Department's plant quarantine regulations.

There is a continuing need by residue testing laboratories in California to be permitted to receive samples of plant material which is often restricted or prohibited entry into California by the Department's plant quarantine regulations. Such material for the most part is used in research studies or scientific tests, which are beneficial to the agricultural industry in California as well as other states. Due to the numerous samples to be received by each laboratory it would not be practical to issue a permit for each sample.

The laboratories must meet certain requirements and agree in writing to abide by certain limitations, conditions and provisions in handling sample material that would otherwise be restricted or prohibited under California plant quarantine regulations.

A laboratory desiring a permit should apply through the County Agricultural Commissioner to Pest Exclusion/Permits and Regulations Program. County Agricultural Commissioner and/or Pest Exclusion will inspect laboratory facilities and equipment. These permits automatically terminate after two years from the date issued, and are revocable at any time.

Applications for permit renewals should be made in writing and received by the CDFA's Pest Exclusion at least 30 days prior to the expiration date of the existing permit.

Minimum requirements for issuing a permit to a laboratory are:

1. Availability of a satisfactory place within the laboratory for holding and inspecting incoming material.
2. Availability of equipment or facilities in laboratory for immediate treatment, or destruction if necessary, of pest contaminated material. Such facilities include but not limited to incinerator, steam sterilizer (autoclave), oven, large cooker, fumigation chamber, acid or caustic vat. A Waring blender, or similar type of equipment, may be approved as a treatment for material for insects.
3. Availability of a freezer capable of holding stored material at 20 degrees Fahrenheit or lower.
4. Proper maintenance of records, listing type of material, date received, and amount of each lot tested or disposed, until all sample has been accounted.

Each laboratory must sign a written compliance agreement with the County/Pest Exclusion to carry out the following

requirements and safeguards

1. The laboratory employee requesting or arranging for shipments of material will consult County Agricultural Commissioner and/or Pest Exclusion to determine if material is subject to quarantine.
2. Collectors or persons gathering material for shipment are to select material carefully to exclude insects, diseases, weeds or weed seed and other pests.
3. All samples are to be free of soil, debris and roots, except root crops well washed before shipping. Laboratories interested in receiving soil or roots etc normally prohibited or restricted by quarantine may arrange for special permit(s) for individual samples. Such permits must be granted prior to shipment.
4. All samples of plant material must be contained in plastic bags securely tied or sealed and shipped in sturdy outer containers.
5. Samples must be shipped by commercial carrier or USPS and are not to be transported as baggage or personal belongings unless advance permission was obtained.
6. The County Agricultural Commissioner is to be notified after arrival of sample, and before unwrapping, and arrangements made for inspection of the sample.
7. Quarantine or infested material that presents pest hazard must be labeled and recorded. The record will be maintained until the entire sample has been utilized in the process of testing or is otherwise treated or destroyed by an approved method. The records must be made available to state/Cdfa and/or County inspectors on request.
8. Permitted quarantine material received must be retained in storage, held in a freezer in plastic bags or other tight containers. Such material must be tagged with a yellow quarantine tag ([Form 66-058](#)) or other suitable tags as approved by the Agricultural Commissioner. Cdfa or County agricultural inspector may destroy any improperly held or recorded material.
9. Plant material received by an approved laboratory shall be used for analysis or testing only. The material must never be used for propagation or removed from the laboratory for any purpose without treatment and prior permission from the Agricultural Commissioner or Pest Exclusion.
10. Quarantine and/or recorded pest material shall be treated or disposed of in an approved manner to the satisfaction of the agricultural inspector, unless the process of testing is determined by the inspector to be an adequate method to destroy or prevent escape of any pest which is or may be present.
11. Materials are to be limited to the minimum amount needed for testing.
12. Some special provisions for selecting and preparing certain quarantine material at origin for shipment are:
 - a. Corn plants (stalks, leaves, or ears). Chop stalks and leaves into small pieces approximately six inches long. Break ear or cob into at least three pieces. Examine for evidence of insects tunneling

in stalks, ear or cob.

- b. Sweet potatoes. Cut in approximately one-half-inch slices and inspect for evidence of sweet-potato weevil.
 - c. Cotton seed and cotton bolls: Time requests for material so that it may be processed or tested immediately on arrival. Only the amount that can be immediately tested is to be shipped. This material cannot be held in storage.
13. If the plant material to be received is also restricted movement by federal regulations, the permittee shall obtain any necessary USDA permit or certificate prior to shipment of the material.

[List of Approved Laboratories](#)

3.6 SOIL POLICY AND APPROVED SOIL LABORATORIES

For the purpose of quarantine handling, soil may be classified into five categories:

1. Soil From Areas Under Quarantine. Soil collected in and shipped from areas under quarantine in which soil is subject to the quarantine regulations in effect at origin.
Restrictions: Shipments accompanied by the appropriate certificates will be inspected and released if inspection findings are negative.
2. Soil Infested With Plant Pests. Soil known or believed to be infested with a plant pest, such as a nematode, fungus, broomrape, insect, etc., intended for scientific purposes, is subject to the regulations of the Federal Plant Pest Act if moved interstate and is subject to the restrictions of Section 6305, Food and Agricultural Code, if moved within the State. A permit is required in either case. This soil is also subject to the regulations of any quarantine in effect at origin.
Restrictions: Shipments accompanied by the required permit, and necessary certificates, will be sent to destination under a 66-008 if properly packaged.
3. Soil From Foreign Countries and U. S. Territories and Possessions is subject to the regulations of the Federal Plant Pest Act. A USDA permit is required (PPQ Form 525).
Restrictions: Shipments accompanied by the required USDA permit will be inspected and released.
4. Soil From Nonregulated Areas. Soil collected in and shipped from nonregulated areas in the continental United States is not restricted unless known or believed to be infested with plant pests as indicated in category 2 above. Soil should be inspected if suspected of carrying plant pests.
Restrictions: Shipments will be inspected and released unconditionally, if no pests are found. If pests are

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found, it becomes subject to the restrictions of category 2 above.

5. Rock, Industrial Sand, Mined Clay, Gravel, etc., which may be way-billed, manifested, or invoiced as a "soil sample" is not restricted unless the article is covered by a specific quarantine or the sample is contaminated with or contains an admixture of soil.

Restrictions: Shipments will be released. If it contains soil as a contaminant or an admixture, it shall be accorded the same status as soil from the same origin and handled accordingly.

Shipments not meeting the above requirements should be refused entry. If requested, shipments may be held at the station under proper safeguards while permit and any other necessary arrangements are made.

SOIL LABORATORIES: COMPLIANCE AGREEMENTS

1. When a California soil laboratory is interested in applying for a USDA Compliance Agreement to receive soil samples from anywhere in the United States or foreign countries (except certain portions of Canada), representatives of the County Agricultural Commissioner, Pest Exclusion (if available), and USDA, APHIS, PPQ should make the initial inspection of the laboratory. With all representatives present, all questions concerning regulations, quarantines, and handling (interstate, intrastate and federal foreign procedures) can be answered.
2. USDA, APHIS, PPQ will complete the Compliance Agreement (PPQ Form 119) by having the responsible laboratory official sign the agreement and the county agricultural inspector will sign for both the County and the State (Pest Exclusion does not sign the agreement).
3. After the Compliance Agreement is completed, the original will be given to the laboratory with copies to the County Agricultural Commissioner and the USDA District Plant Protection Inspector.
4. In the interest of minimizing duplication of effort after the initial inspection and approval, we recommend that the county inspector monitor the laboratory in a routine manner at 6-month intervals. These inspections should be reported to the USDA District Plant Protection Inspector.

STIPULATIONS FOR HANDLING SOIL SAMPLES

Soil samples of any size may be received for processing provided the following requirements are met:

I. Shipping Containers

Soil samples must be shipped in sturdy, leak-proof containers, and marked "Contents - Soil Samples." These containers must be disposed of by burning or other approved methods. In event they are to be re-used they must be

decontaminated by one of the approved heat treatment schedules.

II. Residue

Residue includes all unused soil from the shipment as well as screenings from filtrations and soil used in pH tests. All residue must be disposed of using one of the following methods:

A. Dry Heat

<u>Temperature</u>	<u>Exposed Period</u>
230 - 249° F	16 hrs.
250 - 309° F	2 hrs.
310 - 379° F	30 min.
380 - 429° F	4 min.
430 - 450° F	2 min.

Do not start counting time until entire mass has reached the required temperature.

- B. Steam Heat 15 lbs. pressure for 30 minutes. Individual packages of 5 pounds or less or, if in trays, the soil residues should not exceed 2 inches in depth.

Do not start counting time until pressure reaches 15 lbs.

- C. Fumigation with methyl bromide at 10 lbs. of methyl bromide per 1,000 cubic feet for 24 hours, atmospheric pressure. Soil shall be dried to friable condition prior to fumigation.

- D. Any other procedure approved by the Director(s).

III. Water Used to Process Sample

Whenever water is utilized in processing a soil sample, including initial rinse water of contaminated equipment, the used water shall be treated by one of the following methods before discarding:

- A. Boiling for one minute; or
- B. Placing in holding container and treating with one part DD (dichloropropane-dichloropropene), and one part Triton X-100, or a dishwashing detergent, to 98 parts of water in a holding container. Hold the treated water at 70°F. for 30 minutes before discarding; or
- C. Filtering through a 100-mesh screen or suitable paper filter. The residues left in the filter should be burned. This method is approved only for domestic soil samples; effluent from foreign soil samples should not be filtered but must be handled as in A or B above.

IV. Reshipment

Soil samples will not be reshipped to other laboratories unless such laboratory has a valid USDA permit and compliance agreement for imported soil, or a valid

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compliance agreement for domestic soil.

V. USDA Soil Permit

Requests for permits for soil from Hawaii, U.S. Territories and Possessions, and foreign countries will be directed to the Permit Unit, USDA, APHIS, PPQ, 6505 Belcrest Road, Room 638, Federal Building Hyattsville, Maryland 20782.

VI. Sampling Equipment

When the laboratory has control over the collection of soil samples, they will inform the collectors that equipment used for collecting soil samples in areas subject to Federal and/or State cooperative domestic plant quarantines will be thoroughly cleaned of all soil residues at the collection site.

VII. Adhere to all State of California quarantines dealing with soil. If there are any questions on this, contact the County Agricultural Commissioner.

SOIL LAB INSPECTION CHECK LIST

Yes No

1. Do you have a Federal Soil Compliance Agreement?
2. If yes, when was it issued?
Date _____ What is the number?

3. Are you now or will you be receiving soil samples from foreign countries, territorial U.S., Hawaii, or Alaska? _____
4. If yes, do you have a permit to receive such soil samples?
5. If yes, when does it expire?
Date _____ What is the number? _____
6. Do you have any other permits issued by the CDFA or USDA? _____
7. Are any soil samples reshipped? _____
8. If yes, is soil reshipped to an approved laboratory only? _____
9. Are you aware that foreign soil may not be reshipped? _____
10. Are shipping containers of soil samples marked "SOIL SAMPLES"? _____
11. Are the containers leak-proof? _____
12. Are the used shipping containers decontaminated before

reuse or disposal? _____

13. If yes, Burning _____ (for disposal)
Dry Heat: Temp. _____ Time: _____
Steam Heat: Temp. _____ Time: _____
Ch₃Br fumigation: Lbs./1000 cu. ft. _____ Time: _____
14. By what other method are used shipping containers decontaminated? _____
15. Is soil residue disposed of by:
Dry Heat: Temp. _____ Time: _____
Steam Heat: Temp. _____ Time: _____
Ch₃Br fumigation: Lbs./1000 cu. ft. _____ Time: _____
16. What other method is used to dispose of soil?

17. Is the oven scaled so that no pest could escape?
18. Whenever water is used to process a sample, including rinsing contaminated equipment, is it disposed of by:
Boiling: Time: _____
Chemically treating: Chemical _____ H₂O Temp: _____
Time _____
Filtering: 100 mesh screen _____ Paper _____
(Effluent from foreign soil samples should be boiled or chemically treated)
19. If stored soil is untreated, is it enclosed in sturdy, leak-proof containers? _____
20. Is a log book maintained stating (a) Date soil received, (b) Origin, (c) Disposition date? _____

3.7 POSTENTRY QUARANTINE PROCEDURES

Postentry quarantine was initiated by the USDA to allow the importation of plant material(s) that may have diseases which are not readily apparent. The program provides that "restricted" materials be held by a permittee for a two-year period, six months for *Chrysanthemum spp.*, one year for *Dianthus spp.* Such plant material is subject to inspections by the USDA or CDFA plant pathologist.

PERMIT PROCESS

Complete PPQ Forms 546 (Agreement for Postentry Quarantine--State Screening Notice) and 587 (Application for Permit to Import Plants or Plant Products)

Forward to:

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
PROCEDURAL AND TRAINING MANUAL

**Special Assistant, Permits and Regulations
Plant Health and Pest Prevention Services
California Department of Food and Agriculture
1220 N Street, Room A-316
Sacramento, CA 95814**

- When the plants will be moved
- Note: For more detailed information on this program, refer to the "[Postentry Quarantine Manual for State Inspectors – Procedural Manual for State Inspectors Conducting Postentry Quarantine Duties.](#)"

CDFA will forward a copy of Form 546 to the county requesting inspection of the growing site and to review the requirements of the postentry quarantine program with the applicant (conditions are on the Form 546).

If the site is approved, CDFA will forward the completed Forms 546 and 587 to the USDA, who will issue the permit. It can take up to a month to receive a permit. If permit is issued, the permittee may go forward with the importation of restricted plant material.

Once the restricted plant material is shipped, it will be forwarded to the nearest USDA Inspection Station upon arrival, where it will be inspected.

After inspection, the USDA personnel fills out PPQ Form 236, (Notice of Shipment and Report of Inspection of Imported Plants -Grown Under Postentry Quarantine) which gives the following information:

- Permittee
- Growing ground site address
- When the plant material arrived
- When the plant material was released
- Quantity or amount
- Type(s) of plant material

This form includes an Inspection Station Reference Number. This number allows the proper tracking of the plant material throughout the two-year quarantine period.

Thereafter, the plant material is shipped to the permittee and will begin its quarantine.

MOVEMENT OF RESTRICTED MATERIAL DURING THE QUARANTINE PERIOD

An individual wishing to receive plant material during the quarantine period is required to get a postentry quarantine permit. They need to fill out Forms 546 and 587 as required above.

Once a permit is issued, the individual wishing to ship the plant material is required to obtain written permission from the USDA or CDFA, Permits and Regulations Program to move the plant material. The request must contain the following information.

- Permittee name and address (shipper)
- Number of plant material to be moved
- Inspection Station Reference Number under which the plants were imported
- Receiver's name and address

3.8 SPECIMEN COLLECTION AND SUBMISSION GUIDELINES

- 3.6.1 Disease Pathogen, Nematode and Insect Samples
- 3.6.2 Soil Samples to the Center for Analytical Chemistry
- 3.6.3 Weed Samples
- 3.6.4 Seed Samples
 - 3.6.4.1 Noxious Weed Seeds
 - 3.6.4.2 Mill Approval
 - 3.6.4.3 Individual Seeds for Identification

3.8.1 DISEASE PATHOGEN, NEMATODE, AND INSECTS SAMPLES

- 1. [Disease Pathogens](#)
- 2. [Nematodes](#)
- 3. [Insect Specimens](#)
- Recommendations for individual arthropod Or other groups
- Things to keep in mind when filling PDR's
- Things to be aware of when submitting insect specimens

1. DISEASE PATHOGENS

A sample should be collected any time that an intercept plant material (s) is suspected of infection or may be infected with quarantine or pest-rated plant pathogens. The sample should be submitted to:

**California Department of Food and Agriculture
Plant Pest Diagnostic Laboratory
Plant Pathology Section
3294 Meadowview Road
Sacramento, CA 95832-1448
Phone: 916-262-1100**

The guidelines for submitting such samples are:

1. Collect as many portions of the symptomatic, diseased plants as possible: roots, branches, stems, leaves, and fruit; entire plants may be submitted if small. Mark suspected symptom areas with tape, string, or waterproof pen, directly on the specimen. Include specimens that exhibit margins of healthy and diseased tissues. These margin areas facilitate testing and disease determination.

Virology specimens should include "green" (i.e., fresh) plant tissue associated with the symptomatic tissues (areas). Dry, necrotic or rotting "brown" areas are impossible to test for viruses. Mycology and bacteriology specimens should include the margin areas (healthy and diseased tissues), but submit entire fruits and leaves when possible. These areas are where the fungus or bacteria is still alive and active, facilitating isolation and identification.

2. Packaging of samples is dependent on the material you wish to send:

- Leaves - Place in plastic bag with dry paper towels.

- Stems - Cut to size and place in small plastic bag with crumpled paper towels. Moisten towels if dry conditions occur.
- Roots - Wash free of soil and send like stems.
- Whole plants - May also be sent like stems. Specimens submitted in plastic bags should have holes punched in the bags; this will allow specimen to "breathe" and not kill the organism – unless highly contagious diseases are suspected, then specimens should be double-bagged (see citrus canker guidelines below). Do not enclose the PDR document inside the bag.

3. When filling out the Pest Damage Record ([Form 65-020](#)) be sure to fill in all pertinent information in the spaces provided. Under the space marked "remarks," note what you suspect, what you want them to identify, and anything else that may help with the diagnosis. Include FAX and phone numbers where necessary on the PDR for immediate reply, etc.

4. Samples should be refrigerated and submitted as soon as possible. Samples collected in the field should be stored in an ice cooler with blue ice. Keep specimens at 50 - 55°F.

5. Specimens should be mailed early in the week (e.g., Monday through Wednesday) to avoid layovers during the weekend, which may cause sample spoilage. Do not send specimens by commercial bus lines (e.g., Greyhound) as notification may be slow and CDFA personnel may not be available to pick up the sample immediately. Commercial parcel services (e.g., UPS and FedEx) are good shipping alternatives

6. **Citrus Canker:** Because the disease is easily transmitted through handling or movement of infected material, it is necessary to observe the following procedures when inspecting, sampling, or disposing of any contaminated host materials:

- **Inspecting and Sampling Canker:**

- Use disposable gloves when handling fruit or any other host material for inspection. After samples are collected, place gloves in the bag with the sample.
- If gloves are not worn, be sure hands are dry. Bacteria can be transmitted easily through moisture.
- Collect at least three to four fruits or other plant parts (leaves, stems, etc.) exhibiting the best symptoms of the disease. Do not submit rotten, or partially rotten, fruit.
- Submit whole fruit or leaves for identification. Do not cut lesions out of fruit or leaves.
- Each fruit should be separated from the other fruits to avoid cross contamination. Wrap each sample in dry newsprint or a paper towel, and place each wrapped sample in a sealed plastic bag. If submitting stems or leaves, all samples may be placed in the same bag.
- Place all sealed individual bags inside another plastic bag and seal. If gloves have not been worn, wash hands thoroughly with soap and water after handling samples

-
- and before handling outer bag.
 - Place remaining fruit, plants, or plant parts in plastic bag and seal. Again, wash hands thoroughly with soap and warm water, then double-bag and seal. Place plants on hold pending identification of samples. Make sure all held shipments are properly safeguarded.
 - Rinse any tools that were used in the inspection process and wipe all surfaces coming into contact with the samples with 70% isopropyl rubbing alcohol.
 - **Submitting Canker Samples to Lab:**
 - When filling out the PDR, be sure to include a phone number, fax number, and the name of the person to contact.
 - Place double-bagged samples in a cushioned box for mailing.
 - Use overnight mail if possible.
 - If unable to mail right away, refrigerate samples until you are able to ship them.
 - **Disposal of Canker Samples:**
 - Any items of clothing that came into contact with contaminated or possibly contaminated fruit should be washed as soon as possible.
 - If citrus canker is confirmed on any of the samples, properly dispose of the entire shipment by either autoclaving (best option) or steam sterilizing at a certified facility. Contact the Pest Exclusion District Biologist to help facilitate proper disposal.
 - Please note that it is not necessary to submit samples from any host material that is prohibited under Federal Foreign Quarantine 319.19 or 319.28. This includes all genera, species, and varieties of the family Rutaceae, including Szechwan pepper, citrus nursery stock, and untreated citrus peel. Material covered under a Federal Foreign Quarantine should be rejected and disposed of following the same guidelines as above, regardless of the presence or absence of any pest or disease symptoms.

7. Sudden Oak Death (SOD), *Phytophthora ramorum* samples:

Oaks and Tanoaks:

Symptoms on tanoaks (*Lithocarpus densiflorus*) may include drooping or wilting of new growth prior to the appearance of bleeding cankers. On oaks (*Quercus spp.*), such wilting does not occur. Instead, reddish-brown bleeding from cankers is the first visible symptom. Removal of the outer bark reveals a zone of necrotic tissue delimited from healthy tissue by a dark zone line. Foliage changes occur in the advanced stages of decline. Leaves may cling to branches for up to one year after tree death.

Due to the difficulty in confirming the SOD pathogen from wood from suspect trees, you are strongly encouraged to also survey around any suspect trees and submit other symptomatic material from nearby hosts. It is often useful to

look for blackened leaf tips, a symptom on California Bay trees.

To confirm that a symptomatic tree has the SOD *Phytophthora*, the pathogen has to be cultured on a special agar medium from a sample of the inner bark of the tree. Sampled bark pieces are placed in petri dishes containing pimarcin-ampicillin-rifampicin-PCNB agar (PARP), a selective media for *Phytophthora* species. To obtain the PARP medium, contact the Plant Pest Diagnostic Branch (PPDB) or your local UC Cooperative Extension office.

Equipment needs:

- Axe or hatchet
- Sterilizing agent such as 70% ethanol, Lysol or 10% commercial bleach
- Pens for labeling samples
- Scalpel or sharp knife
- Forceps
- PARP selective media in petri dishes
- Tape to seal petri dishes
- Paper bags and/or box for sending samples to the lab

Ensure all tools are sterilized prior to sampling and between taking samples.

- Shave away the outer bark above or to the side of a seeping area and examine the lesion area until a canker margin (zone line) is evident.
- Use the knife and forceps to excise small pieces (approx. 1/8" x 1/8" or smaller) of the phloem including both healthy and necrotic bark tissue on both sides of the zone line.
- Place each phloem piece on the medium and push down until it is covered by the medium.
- When you have 6 to 8 pieces of phloem inserted in the medium, seal the plate with the tape and label it, including the date, location and species of the tree sampled. Repeat the same process on another plate (sample each tree using two plates).
- Mail plates for incubation and identification of the fungus to:

California Department of Food and Agriculture
Plant Pest Diagnostic Laboratory
3294 Meadowview Road
Sacramento, CA 95832-1448

Rhododendron (*Rhododendron sp.*)

Symptoms of *P. ramorum* on Rhododendron, include twig dieback and leaf spotting, usually not mortality. Look for brown spots on leaves that have diffuse, fuzzy margins, rather than sharp margins indicative of sunburn injury, and generally do not involve the midrib of the leaf. Also, look for blackened shoots with or without foliage still attached.

California or Evergreen Huckleberry, (*Vaccinium ovatum*)

The symptoms include twig dieback and, in advanced stages, will kill canes down to the ground, killing all the above

ground portions of the plant. Look for small, blackened twig cankers that are girdling the twigs. Tissue beyond the twig cankers may be dried and/or wilted. Cut the twigs below the cankered regions (well into the healthy tissue).

California Bay Laurel (*Umbellularia californica*)

The symptoms of *P. ramorum* on California bay laurel have been confined to leaf spotting, often surrounded by a chlorotic halo. Leaf spots are often at the leaf tip and may or may not have a blackened line at the border. Anthracnose may also cause this symptom.

Madrone (*Arbutus menziesii*)

Symptoms include leaf spotting and cankers on small branches. At advanced stages, the entire leaf and shoot turns black.

California Buckeye (*Aesculus californica*)

The symptoms of *P. ramorum* on California buckeye include leaf spots and cankers on petioles and small twigs. The leaf spots appear to be more distinct around the margins of the leaf.

B. NEMATODE SAMPLES

Damage to plants caused by plant parasitic nematodes cannot be diagnosed on the basis of plant symptoms. Plants affected by nematodes may show no symptoms of damage, or manifestation with general symptoms of an impaired root system commonly produced by several biotic and/or abiotic conditions. In order to detect the presence of plant parasitic nematodes associated with plants, samples are collected appropriate to the biology and feeding behavior of nematodes. Most nematodes of quarantine significance e.g., burrowing nematode, reniform nematode, sting nematode, European dagger nematode and soybean cyst nematode, feed on plant root tissue. Others, such as the strawberry summer dwarf nematode, feed on above ground plant parts. The following guidelines concern the collection, preservation and shipment of quarantine samples for nematode assay:

1. Collect up to one quart of roots and soil from plant when possible or a composite sample of at least one quart of roots and soil from several plants. If shipment is less than one quart then collect one cup full of roots and soil. If the shipment is less than one cup then collect as much of a representative sample as possible.
2. Collect roots and soil from several plants (sub-samples) in large shipments. Mix sub-samples into a composite sample. Soil/root sub-samples from the same plant variety may be combined to form a composite sample.
3. When sample comprises a few roots without soil, and no processing facility exists in the county laboratory, put roots in a nematode sample vial with one or two drops of water and send by the quickest mail to CDFA's Nematology Laboratory. More than one vial per sample may be used as long as proper and complete origin/sample identity information is given. When the root sample is large, put roots with one or two drops of

water in a plastic bag. Avoid large air spaces by sealing/tying the bag close to the enclosed sample.

4. Do not moisten sample by enclosing a moist paper towel in sample bag.
5. Put sample in durable plastic bag only. Use two bags if necessary. Dry seed samples may also be put in durable plastic bags. Raw vegetable and aboveground plant parts should be put in plastic bags.
6. Label sample bag. Do not enclose label tag in bag. For shipment to laboratory, place all written material in box, not within sample bag.
7. Keep samples cool (50-55 degrees F) after collection. During collection, put samples in an insulated cooler. If necessary, use blue ice packets but wrap ice packs in paper to prevent freezer burn of sample through direct contact. Do not freeze the sample. Do not place samples in direct sunlight or in car trunk.

C. INSECT SPECIMENS

The following is a basic overview of collecting, preserving and shipping techniques, which will assist field personnel in submitting insect specimens to the CDFA Plant Pest Diagnostics Branch in Sacramento:

1. All samples should be mailed in boxes. CDFA often provide such boxes. Do not submit samples in envelopes, even the padded ones. The samples invariably arrive crushed.
2. Alcohol (70-75% isopropyl) in small vials, sometimes supplied by CDFA. These vials should be used for most general collecting work. Larger collection containers will have to be supplied by the collector. Any jar or vial with a tight fitting lid is adequate, and these can be filled with common rubbing alcohol. For specimens, like larval forms that require boiling water, a microwave oven is useful. Do not microwave the specimen, just the water!
3. Killing bottles can be used for some groups of insects, especially adult Lepidoptera. Cyanide is no longer recommended, but ethyl acetate or fingernail polish remover, few drops on absorbent paper can be used for this purpose. Alternatively, placing the specimen in a jar and freezing is an option, especially for medium to large Lepidoptera. Samples should be thawed prior to shipment.
4. Some specimens, especially the relatively non-mobile insects such as scale insects, whiteflies and adult Lepidoptera, are best sent dry, either in perfectly dry vials or in paper or plastic bags. If the sample is in bags, some amount of paradichlorobenzene (PDB), mothballs or flakes, should be included in the container to kill anything that might be alive. The PDB must be wrapped and sealed in paper toweling or facial tissue to keep it from mixing throughout the sample.
5. Collect an adequate number of specimens. Variability is a common problem in some species groups, and a large series facilitates the taxonomist's ability to give correct determinations. Also, a series may assure that the proper

life stage necessary for identification is present, especially in the case of insects that have an incomplete metamorphosis.

6. Whenever possible, the sample should include host plant material. Write the scientific or common names of the host(s) on the accompanying PDR. Small arthropods such as scales, whiteflies, aphids, mites, thrips and the like are easily damaged if collected individually. Parts of the plants with the specimens attached are often best collected by placing the infested plant parts directly into alcohol. However, be careful not to take whole leaves and roll them too tightly in order to get them into a small vial. The leaves turn brittle and will shatter when removed from the vial. The specimens may also be crushed.

RECOMMENDATIONS APPLYING TO INDIVIDUAL ARTHROPOD OR OTHER GROUPS

1. **ACARI (mites)** are best collected fresh, into alcohol, along with infested parts of the leaf or other plant parts. Identifications, particularly of the tetranychid mites, require the male mite. Collecting a good sample on infested plant parts improves the chances that a male will be present in the sample. Samples can be collected in bags if the sample is mailed as soon as possible after collection. Waiting too long will result in dried out or moldy samples and at times lost specimens.
2. **COLEOPTERA (beetles and weevils)** may be killed in either alcohol or a killing bottle. Immature stages should be dropped in boiling water for 1-2 minutes and then transferred to 70-75% alcohol. If it is not possible to kill them in boiling water, specimens may be placed in the vial of alcohol. If beetles in any stage have been killed in alcohol, they may be preserved and shipped in the same material. If killed by other methods, adults may be transferred to alcohol or layered between soft material such as tissue paper or paper napkins - do not use cotton as its fibers can become tangled around the insect's appendages and removal could break them off. Broken and missing tarsal or antennal segments hamper identification.
3. **DIPTERA (true flies) and HYMENOPTERA (ants, wasps, and bees):** Adults of all Diptera and Hymenoptera are most easily handled for identification if sent to the laboratory preserved fresh in 70-75% alcohol. Most of the specimens may be killed and preserved directly in alcohol. Specimens that are dead when found should be carefully placed in hot water for 10 minutes before being transferred to alcohol. This softens the tissues and prevents breakage. Larvae of Diptera and Hymenoptera should be submitted for identification in 70-75% alcohol. They are best preserved if fixed before preservation. Fixing may be accomplished by dropping the living larvae in boiling water for 1-2 minutes. Larvae of Diptera and Hymenoptera are usually much more difficult to identify

than the adults, so if at all possible, adults should be associated with larvae. If not possible to collect adults, a sample of the damage caused by the larvae should be submitted.

4. **GASTROPODA (snails and slugs)** should be killed by submersion in water, usually 12-24 hours and then preserved in alcohol, allowing for approximately 10 times the specimen body size with the alcohol.
5. **HETEROPTERA-"HEMIPTERA" (true bugs)** should be collected directly into alcohol.
6. **HETEROPTERA -"HOMOPTERA" (Scales, mealybugs, whiteflies, aphids, psyllids, and leafhoppers)** are collected in a number of ways depending on the group. Scale insects and immature whiteflies can be submitted on pieces of plant in alcohol, but it is preferable if they are sent on the host plant in plastic bags. Adult whiteflies should be collected in alcohol. Also, in the case of whiteflies for positive identification, it is usually necessary to have the last stage nymph or pupa in the sample. Mealybugs can be with part of the host if convenient. Most mealybugs are mobile throughout life; if collected into a bag, they will often get into the corners of the collection bag and become crushed. Collecting into alcohol will prevent this. While mealybug wax patterns can be used for tentative field identification and local county entomologist may use these as diagnostic characters, the wax patterns are not used in CDFA's Plant Pest Diagnostic Lab for identification. Therefore it is not important if the wax comes off the specimen in alcohol. Also, mealybugs usually must be slide mounted using a process that takes several hours, so the turnaround time in this group is generally longer than for the rest of the scale insects, which often do not require this same preparation. Aphids and psyllids should be collected in alcohol and should never be preserved dry. For aphids, select the largest individuals of both winged and wingless forms, if present. Alcohol is preferable for the leafhopper, cicada, and treehopper groups, but dry or pinned material is adequate.
7. **LEPIDOPTERA (moths, skippers and butterflies)** adults should be submitted in alcohol only as a last resort. Wing color patterns may be critical for identification and these are often destroyed in alcohol. After killing in a kill jar or by freezing, adult Lepidoptera should be placed in a container lined with soft paper towels or facial tissue such that the specimens will not shift around during shipment. Where numerous specimens are to be sent, several layers of insects and paper may be placed in a shipping box. Larvae of the Lepidoptera should be killed in boiling water and transferred after 1-2 minutes into 70-75% alcohol. If boiling water is not available, place the specimens in alcohol as described under Coleoptera.
8. **ODONATA (dragonflies and damselflies), NEUROPTERA (lacewings, antlions, and dobsonflies), DERMAPTERA (earwigs)** and other miscellaneous orders not covered above can be sent dry

or in alcohol. If sent dry, they should be carefully layered in tissue paper and packed so as not to break apart during shipping.

9. **ORTHOPTERA (grasshoppers, crickets, locusts, cockroaches, walkingsticks, and mantids)** are best collected into alcohol, either using a large vial or inserting into a small vial posterior end first. Grasshoppers and katydids inserted into a vial headfirst often cannot be extracted without breaking off the rear appendages.
10. **THYSANOPTERA (thrips)** must be shipped in alcohol. They are best collected by beating the host over a light and/or dark paper or cloth sheet and capturing with a wetted camel hairbrush from the beat sheet into alcohol. If the host is not a valuable one, the camel hair brush can be used to collect thrips directly from the host into the vial. If the host is a valuable specimen, the beat sheet should be used because the alcohol adhering to the brush may cause damage to the host. Try to collect adults specimens with wings, as identification of larvae is often impossible.

GYPSY MOTH SAMPLES

Submit a lab sample when evidence of any life stage is found. Use the following procedures when submitting egg masses for confirmation:

- When removing egg masses, use a solution made up of ¼ cup of laundry detergent (Tide, etc.) to one quart of water. This solution will not assure 100% mortality, but it will reduce the hazard of viable eggs falling from the egg mass during removal and prevent scattering of eggs.
- Place the egg mass in a container filled with alcohol. Do not use the detergent solution. Write on the PDR under "REMARKS" if the eggs were examined and were found filled with fluid. All specimens submitted in the manner described above will be identified as viable or non-viable by the lab.
- Fill out a PDR on all gypsy moth specimens whether or not they appear to be alive. Before submitting specimens, assure that all life stages are dead. In the "REMARKS" section of the PDR include the following information:
 - If egg mass, whether they were examined and filled with fluid
 - County or border station name
 - Number of the Gypsy Moth Rejection Warning Notice ([Form 66-008A](#))
 - If out-door household articles (OHA) document was present or absent

Affix the gummed number label from the PDR slip to the copy of the 66-008A that is mailed to Sacramento.

3.8.2 WEED SAMPLES

Plant specimens in plastic bags or bottles always run the risk of arriving at the laboratory decomposed or "cooked" beyond recognition. The preferred way to send a plant specimen to the Botany (Weed) Laboratory is to place the specimen between sheets of folded newspaper. Don't use tape or staples; they aren't needed and only get in the way.

Put the specimen in a manila envelope, or a flat box. A very good shipping container can be made from two pieces of corrugated cardboard. Place the specimen and the PDR slips between the two pieces of cardboard and then seal with shipping tape around the edges. The mailing label is placed on the outside and it's ready for mailing. Several counties have used this method for years with excellent results.

Even very delicate aquatic plants such as hydrilla or elodea should be sent this way. If the newspaper becomes soggy, you should change the paper, perhaps several times, to remove the excess moisture before sending the specimen. This will help to dry it out and keep it from rotting while in transit.

Reminder: A weed specimen can never become too dry. Dry plant material can always be examined and identified by a plant taxonomist, but nothing can be done with a soggy, moldy and decomposing specimen.

3.8.3 SEED SAMPLES

3.8.3.1 NOXIOUS WEED SEEDS

Seeds for quarantine purposes should be collected and submitted in the same manner as regulatory seed samples. The California Seed Law lists the appropriate amount of seed necessary for an exam.

Seed that is treated (includes those treated with pesticides, fertilized, pelletized, coated, or dyed) **shall be placed in plastic bags**. If samples are not in plastic, the sample may not be processed.

If the sample is a seed mixture, a copy of the seed label with the percentages of the components shall be submitted.

A sample submitted as a quarantine/regulatory sample must have both an Inspector's Description of Sample (Official Sample Form) and a PDR with the following:

- One PDR per sample.
- Note the origin of the seed (as well as where it was shipped from and the destination).
- Remember to fill the shipment size of the lot shipped/received. Also, include the size of the container (e.g., 20/50 #, or 1,000 #/50 # - not 20 sacks)
- Host/Crop section - enter the type of crop (e.g., tall fescue, not "grass seed")
- In the REMARK section of PDR, enter Lot Number,

Type of treatment, etc., Signal words-Noxious Weed Exam, Rush and Fax or Phone number of County contact (not the seed company).

- Mark the PDR number clearly on the outside of the sample container. Do not place paper work inside the sample container.

3.8.3.2. MILL APPROVAL

Samples are best submitted in brown paper bags (double-bagged if necessary). Mark the PDR number clearly on the outside of the sample container. Write one PDR with the following "Remarks:"

- If sample is processed (cracked, ground, rolled, pelletized, heat treated, etc.), use the words - Mill Approval, check for viable weed seeds.
- If sample is unprocessed, use the words - Mill Approval, check for noxious weeds.

Do not place paper work inside the sample container.

3.8.3.3 INDIVIDUAL SEED FOR IDENTIFICATION

Seed samples may be submitted in any appropriate seed container. Do not place the samples in alcohol. Provide sample origin information on the PDR. Mark the PDR number clearly on the outside of the sample container.

3.8.4 SOIL RESIDUE SAMPLES

1. Take 10 one-quart samples from each shipper. If 10 one-quart samples cannot be taken, take as many one-quart samples from each shipper as possible (up to 10 quarts).
2. Samples should be taken from larger pots (> 1gallon).
3. Gather soil from one pot for each sample in order to test uniformity of treatment procedures over different pots. Pull root balls from the container and shave off soil from the bottom and sides of root ball area. Replace the plants and add potting media to refill the container to its original level.
4. Place soil samples in foil bags for analysis. If you run out of foil bags, use glass containers. Do not use plastic as this can interfere with results. As well, be aware that light and heat degrade some elements/chemicals. Keep samples cool, covered, and submit them ASAP or keep them in a refrigerator or freezer.
5. Use one laboratory form ([Form 11-002](#)) for each sample. Label samples with the name of collection site e.g. production nursery and an identifying number (e.g., XYZ Nursery, #1 of 10). A permanent ink marker (e.g., Sharpie pen) will write on the foil bags, however, you may use any kind of adequate tape or paper label. For maintaining identity, be sure that the number of the sample corresponds to the sample number written on the lab form that accompanies it.
6. Record all information that may be useful in properly identifying the sample.
7. Use one form for each soil sample. Samples may be driven to the lab or sent via expedited delivery.

3.6.5 DOCUMENTATION AND GENERAL LABORATORY GUIDES

FILLING PEST AND DAMAGE RECORD [FORM 65-020](#)

The Pest and Damage Record (PDR) can be submitted either filling the [blank form](#) or [online](#)

- Write/enter in county number, activity code and situation. Leave remainder blank if quarantine shipment
- If a Botany sample, include range, township and section.
- Check correct box at top for routing to the appropriate specialist.
 - Insects: if two kinds of specimens in one vial, state that in remarks section. If more than two, use another vial and fill out another PDR.
 - Disease Pathogen Or Nematode Specimens-refrigerate to keep fresh.
 - Weed specimens-send best possible specimen. If seeds are present, send to seed lab.
- Complete name, address, date, collector's name and section as accurately as possible.
- Always indicate the host for an insect specimen. This is especially important when found on an unexpected host. Include the botanical name and variety of host plant if known, for nematode samples.
- If sending to plant pathology, check off appropriate symptoms. If an insect, check condition and stage when found. Appropriate symptoms are useful for insect samples also. Write in pertinent information in remarks section (never write in "determination" section if holding a shipment pending I.D., write "RUSH-QUARANTINE" to expedite).
- Write in county name.
- Attach I.D. # to specimen.

Tear off set of pages, keeping pages attached together at the top. Keep last yellow copy for your records.

Plant Pest And Damage Record (PDR) Internet Access:
Inquiries regarding the status of a PDR for plant diseases may be accessed online. The Pest and Damage Record information is acquired by entering the PDR number in the search section.

The information for Entomology is on the Internet and can be accessed from a database of the CDFA Plant Pest Diagnostics Center via the PEIM (Pest Exclusion Information Management) link on PE's extranet homepage.

The following shows a copy of the record of a *Phaseolus vulgaris* plant sample collected from one of the phytosanitary inspection seed fields and it was diagnosed for two different PQ disease symptoms. The record gives the inquirer the information that the sample was received and diagnosed by so and so and on such and such a date. However, the diagnosis is kept off the public record due to legal and confidentiality concerns.

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Plant Pest Diagnostics Branch
Pest and Damage Record
Sample Query Results

The following records were found for the ID numbers you entered:

ID Number: 1980144
Date Collected: 9/19/2005
Host: *Phaseolus vulgaris*
Date Received: 9/23/2005
Assigned to/Contact: Jane Doe
Days delayed: 0
Signed by: Jane Doe
Signed Date: 9/23/2005

ID Number: 1980144
Date Collected: 9/19/2005
Host: *Phaseolus vulgaris*
Date Received: 9/23/2005
Assigned to/Contact: TIDWELL/DF
Days delayed: 0
Signed by: J. Doe
Signed Date: 9/24/2005

Some General Notes on Filling Out PDR Slips

- Use pen (this is a legal document)
- The city should be the location of the collected specimen. Do not abbreviate city names
- If the specimen was collected during a quarantine inspection, we need the quarantine origin
- Always state the host from which the specimen was collected. This may not always be plant material; it may be a building or a home
- A PDR filled out as completely as possible increases the accuracy of record keeping. Slips appropriately marked "RUSH" are handled expeditiously. Phone calls are made to the county offices on those involving quarantines or human health problems. All others are mailed as soon as they are returned from the entomologist.
- Write your first and last name on PDR. This helps the lab to credit the collector in publications dealing with new or otherwise important collections.
- Use correct activity codes:
 - Quarantine inspections use codes beginning with "0"
 - Nursery inspections use codes beginning with "7"
 - Detection surveys use code "12"
 - General situations use code "10."(These usually involve "walk-ins" by members of the public)

Things To Be Aware Of When Submitting Insect Specimens To The Lab:

- Nothing should be sent to the lab alive unless first approved by the entomologist involved.

- There should be enough alcohol in the vial to cover the specimen and then some (See Gastropoda above). If not properly preserved the specimen can degrade/rot by the time it is received and unidentifiable. It can also become very smelly!
- When submitting insects collected in sticky traps, cut out a small piece of the trap (e.g., with a razor blade) containing the suspect insect. Submit that piece in a small vial. The piece of the insert should be cut to a size that will minimize movement inside the vial during mailing. DO NOT submit entire large trap inserts, these are cumbersome, messy, and confusing as to what needs to be identified. Submit ONLY the small piece with the specimen to be identified. However, there are some exceptions in rare survey projects where an entire trap must be inspected.
- Please make sure each vial or trap has a corresponding PDR # attached to it.
- Please submit specimens in clear vials or bottles and make sure the corresponding PDR number is attached lengthwise to that vial or bottle. This facilitates viewing of the specimen.

Links to recent Pest Exclusion Advisories (PEA)

[PEA 24-2005](#)

[PEA 35-2004](#)

[PEA 31-2003](#)

[PEA 24-2003](#)

3.9 EXAMPLES OF CERTIFICATES

3.9.1a FEDERAL DOMESTIC QUARANTINE CERTIFICATES AND PERMITS

Various certificates and permits are used in federal domestic plant quarantine for the control or eradication of a pest in a state. Below are select certificates and permits that should be accepted by all State/County Regulatory Officers as notification of meeting the quarantine requirements in effect at point of origin.

1. Individual shield-type package certificates are in several forms, including a 2" x 3" paper certificate, a rubber stamp, a postage meter certificate, or may be printed on receipts, cartons or shipping labels when authorized. Printing dyes may be furnished by the Department on loan to approved shippers and returned when a printing order is completed.
2. Master certificate is used for car or truck lot shipments and will accompany the bill of lading or other shipping documents. This certificate will describe the contents and quantity of the shipment.
3. Limited permit authorizes movement of non-certified regulated articles without diversion to specified destinations for
 - Limited handling, processing or treating
 - Safe utilization or consumption

The above certificates are uniform for most federal domestic quarantines and cover large percentage of regulated movement. However, there may be special purpose certificates for specific programs such as barberry nursery, the gypsy moth, stone and quarry, scientific purpose certificates. The use of the later forms are usually not frequent.

3.9.1b MATERIAL ORIGINATING IN FEDERAL DOMESTIC QUARANTINE AREAS

The USDA/APHIS/PPQ advises it is safe to assume commercial shipments of plant material moving from a federal domestic quarantined area to a non-quarantined area for packaging and mailing have met the federal quarantine certification requirements.

Uncertified commercial shipments of plant material mailed from a non-regulated area, even though material originated in a regulated area, may be admitted if inspection findings are negative.

Material covered under a California quarantine would be required to meet conditions of the California quarantine, if the material originated in Florida and was reshipped from New York, it would need a Florida certificate.

Plant material shipped directly from a federally regulated area would require federal certification;
Examples of commercial shipments of material not requiring federal certification:

- o Okra originating in Imperial County being reshipped from Los Angeles County
- o Plants originating in Georgia being reshipped from Illinois

3.9.1c CERTIFICATION - VERIFICATION BY ONE STATE FOR ANOTHER STATE

Mail-order houses, and some nurseries, purchase plant material from many states and then transship to California. For quarantine purposes it is important to know the origin of the material. The following examples may be used as guides in processing plant material in regards to origin:

- 1 Minnesota officially certified *Anthurium* originated in Florida. Burrowing nematode certificate accompanied shipment from Florida, acceptable.
- 2 Minnesota shipper stated maple tree originated in Pulaski County, Arkansas. Maple is acceptable, as no California exterior quarantine involved.
- 3 Minnesota shipper stated maple tree originated in Arkansas, not acceptable. California exterior quarantine indicates portion of state is under quarantine.
- 4 Minnesota official certified maple tree originated in Arkansas and an ozonium root rot certificate accompanied shipment from Arkansas, acceptable.

Permission has been given to some states to certify materials coming into CA. Such certificate must bear "Meets the requirements of California quarantine Sections ...". This statement will be on the certificate from the origin state.

3.9.1d COMMUNICATIONS WITH OTHER STATES

Correspondence with nurseries, individuals and officials of other states, relating to the rejection or certification of plant materials, signed as "Agricultural Commissioner" may cause confusion.

To write to persons in other states relative to rejection or certification of plant materials or other plant quarantine matters, letters should be signed as "State Plant Quarantine Officer", which is the designation in the Agricultural Code. Only those person holding plant quarantine certificates may legally sign rejection notices, State phytosanitary certificates or certificates of quarantine compliance.

Matters pertaining to policy or rulings on controversial points relative to plant quarantine matters should always be referred to CDFA Pest Exclusion for reply.

Correspondence relative to rejections or policies already in effect need not be referred to this office for reply, but copies should be forwarded for information purposes.

3.9.2 CERTIFICATE OF QUARANTINE COMPLIANCE (ORIGIN OR TREATMENT)

Certificate of Quarantine Compliance (CQC) is issued to agricultural commodities and/ or products requiring treatments as a condition of entry into the destination state. This certificate should be used to certify material to any state or territory that may have an existing quarantine against a pest from California, e.g. brown garden snail quarantine by FL. Some destination states/territories at times specifically request that they want a state phytosanitary certificate instead of CQC. State phytosanitary certificate should be issued to shipments to states that do NOT have an existing quarantine against a pest in California and made no specific request that requires issuance of CQC, in their regulations.

The California Department of Food and Agriculture and County Agricultural commissioners may enter into an agreement with a person or persons who meet prescribed qualifications, authorizing said person to treat said articles and issue a "Statement of treatment" as required in the agreement. Such treatments must:

1. Be done in a state approved treatment facility
2. Comply with all federal, state and county regulations

- and meet destination state/county requirements.
- 3. Follow recommended schedules prescribed for the commodity, as to material, exposure time, temperature, and humidity (if applicable). Necessary safety equipment must be available.

3.9.3 NOTICE OF REJECTION

[Notice of Rejection](http://phpps.cdffa.ca.gov/user/firmLogon2.asp) can be completed at CDFA website (<http://phpps.cdffa.ca.gov/user/firmLogon2.asp>). A login account is required for access to the site. Hardcopies can be completed using the instructions.

Program Use

The NOR program is menu driven allowing for navigation by simply clicking buttons with a mouse. Keyboard commands (using with the underlined letter) as well as the Access97 menu and toolbar buttons are also available. It is recommended to create a shortcut button on your desktop giving you quick access to the program. Double clicking this icon will start the program and open to the main menu screen.

Navigation on menus and forms uses a combination of clicking with a mouse, and keys, and the button. The button is used to move between buttons and fields. The button is used to select the highlighted item. The button in combination with a character is used perform the function of the button the character represents. These characters will be underlined.

MAIN MENU SCREEN

This is the first screen visible when the program is started. It allows navigation to all forms needed to operate the program. The main menu screen includes six buttons:



- o **Add/Edit Notice of Rejection** – used to add a new rejection
- o **Table Utility** – gives access to most of the utility tables (shipper, receiver, commodity, etc) as well as station configuration for the original setup.
- o **Prepare e-mail** – used to prepare a file to send to Sacramento containing all rejections since the last time this button was used. This button should only be used when ready to send files to Sacramento.

- o **Reports** - brings you to the menu of Reports available.
- o **Quit Application** – This is the button with the arrow pointing out the door. Clicking it exits the program.
- o **About Application** - This is the button with the question mark. Clicking it displays a window showing the version and help contact people.
- o A single click with the mouse will cause any of these buttons to open their associated form. You may also use the underlined characters to open the forms (i.e. type “a” while holding down the key to open the “add new notice of rejection” form).

NOTICE OF REJECTION FORM -- PAGE 1

This form is used to enter a new NOR or edit an existing NOR. Press the Tab key to move forward from field to field and to move backwards on the form. This form is made up of two separate forms. The main rejection form contains the top half of page one and all of page two. The material being rejected is part of a subform allowing for as many materials per rejection as needed and includes the quantity, origin, pest, and reasons rejected.

The form initially goes to the last Notice written. To start a new blank Notice, click on the New button, near the bottom of the screen.

CONTROL BUTTONS ON THE REJECTION FORM

These buttons appear near the bottom of both pages of the form.

- o **Go To Page: 1** – move to page one. The Page Up key will also get you there.
- o **Go To Page: 2** – move to page two. The Page Down key will also move you to the second page of the form
- o **New** - start a new blank form.
- o **Duplicate** – move to a new input screen to add a new NOR. This is especially useful when entering a new NOR from the same shipper as the previous NOR.
- o **Delete** – removes the current notice from the database. Note: If you delete a new or filled out Notice, the ID Number for that notice will not be used again.
- o **Print** – sends to the default windows printer any rejections that have the "print this NOR" box checked.

- **Close form** – closes the add NOR form and returns to the main menu screen.
- **Quit** – closes the NOR program
- **Print Blank Form** - creates a blank form that can be used in the field, or when a computer is not available.

RECORD NAVIGATION

Record navigation buttons appear at the bottom of the NOR form, as well as the Material Rejected subform.

- **First** button brings you to the first Notice or Material recorded.
- **Previous** button brings you to the Notice or Material immediately before the current one.
- **Next** button moves you to the Notice or Material following the current one. If you click Next when you are at the last Material record, a new Material record will be created. If you click Next when you are at the last Notice record, a new Notice record will be created, with a new ID Number. Note: If you delete a new or filled out Notice, the ID Number for that notice will not be used again.
- **Last** button moves you to the last Notice or Material record.
- **New** button creates a new Notice or Material record. If you create a new Notice, a new ID Number will be created. Note: If you delete a new or filled out Notice, the ID Number for that notice will not be used again.

The **Date In** field defaults to the current date. This should be changed if entering an NOR for a previous date. This field should show the date as mm/dd/yyyy. If only a two digit date is displayed, do the following. Click the "Start" button on the task bar. Click settings and control panel. Double click "Regional settings" click "Apply" then click "OK". You should now see four digit years in any of these date fields.

The time that the rejection was started can be entered into the **Time In** field. The date and time that the rejection was finished can be entered in the **Date Out** and **Time Out**

field. These two fields can be filled out later, after the notice has been issued.

The program assigns an **I.D. Number**. The default number should be used unless the NOR is issued a final number in the field. See appendix #1 for a full description of how to create unique numbers in the field. It is important that this number be unique statewide.

Enter a **PDR number** if a pest was found. If multiple PDR's were used, enter one here and the remainder in the comment field.

Select **Entire** or **Portion** for the **Shipment** being rejected. If only a portion is rejected and the remainder is sent to destination, check the Portion box. The up and down arrow keys will also toggle between these two boxes. If the shipper is a business, check the **commercial** box. Check the **E-commerce** field if it is known that the shipment was ordered on the Internet.

Material Received Via: This should only be one of the categories listed in the pick list. This can be viewed by clicking the downward facing arrow to the right of the box. The next box will only list addresses for the selected carrier. If Fed Ex was selected in the Material Received Via box, only Fed Ex addresses will show here. If the Fed Ex you want is not on the list, type the new entry (i.e. Fed Ex NewAddress). A message box will appear asking if you wish to add a new carrier. Select yes. Input the new address, city, state, and zip code for the Fed Ex NewAddress. Click the Close button. This will insert your new carrier in the form and add the new carrier to the list for future selection.

Material Rejected (Common and Scientific name): This field is for the material (commodity) name only. Do not add identifiers such as fruit, plant, seed, 10" potted, etc. This is the first input into the subform. You may input as many materials on each rejection as necessary. Select a material from either the common or scientific name lists. You may also type a name and as you type, selections will appear based on the letters you type matching an item on the list. If the material you are entering is not on the list, a message box will appear asking if you wish to add a new material. Click Yes. Fill in the required information and click the Close button. The material will be placed on the form and added to the list for future selection.

Type This is where you choose the type of material being rejected as one of the material types listed in the drop down list, such as fruit, plant, seed, other, etc.

Quantity Input only a number in this field. If "Type" in the above field is fruit, the quantity should be entered as pounds only. If the "Type" is plants, the quantity should be each so each individual plant is counted.

Unit This field reflects the unit for the number input into the quantity field.

Origin Enter the origin of the material. This is where the material was grown. This may or may not be from where the material was being shipped. If unknown, enter "unknown".

Pest (Common and Scientific name) and **Rating** these fields will normally not be field in at the time of the rejection. These are to be filled in once the pest is identified through the PDR number entered above.

Reasons for Rejection Up to three different reasons can be selected for each material being rejected. If more are needed, type them directly into the comment section. This list can not be added to. If you find a quarantine or reason for rejection not covered by a selection, add it to the comment section and send an e-mail to NORTransfer@cdfa.ca.gov including "new text" on the subject line.

Once a reason is selected from the list, the appropriate text appears in the comment section. Please review the text to make sure it is appropriate. You may edit the comment field if necessary. If two or more materials are rejected for the same reason, place the number in the appropriate field for each material, then delete the duplicate text from all materials other than the first. In this way you will not have duplicate text on the same NOR but we will have the reason for each material rejected in the database.

NOTICE OF REJECTION FORM -- PAGE 2

Click on Go to page "2" button or press to move to the second page to enter shipper and receiver information.

Shipper Pick a shipper from the list or type the name. Names from the list will appear as you type characters. If the shipper is not on the list, a message box will ask if you wish to add a new shipper. Click the Yes button. Fill in the shipper information and click "close". This shipper information will be placed on the form and available on the list for future rejections. It is important that if you add a new shipper, you fill in as much information as possible including address, city, and zip code. If unknown, enter "UNKNOWN".

Receiver Pick a receiver from the list or type the name. Names from the list will appear as you type characters. If the receiver is not on the list, a message box will ask if you wish to add a new receiver. Click the Yes button. Fill in the receiver information and click the "Close" button. This receiver information will be placed on the form and available on the list for future rejections. It is important that if you add a new receiver, you fill in as much information as possible including address, city, and zip code. If unknown, enter "UNKNOWN".

Destination County This field is filled in automatically based the city of the receiver. You should check this field before proceeding to make sure it is filled in correctly. Not

all cities within the state are listed so this field may be left blank and need to be entered manually.

Drivers Information If you are rejecting a truck, enter the drivers information. Select the driver from the pick list or type the name. Names from the list will appear as you type characters. If the driver is not on the list, a message box will ask if you wish to add a new driver. Click Yes. Fill in the driver information and click the Close button. This driver information will be placed on the form and available on the list for future rejections.

Officer Enter the name of the officer issuing the NOR. Either select from the list or type the name.

Notice to shipper Check each box next to options available to the shipper. If an option is not on the list, click Other then add the description (i.e. destroy).

Copies to Check the box of each person copies of this NOR will be sent. If an option is not on the list, click Other then add the description (i.e. USDA). State is not included on the list because all NOR's will be e-mailed to the state. In the **Disposition** field, briefly indicate what was actually was done with the shipment.

Hours spent on NOR Enter the time spent filling in and working on this rejection. Include treatment or destruction time if appropriate. Do not include time spent on the original inspection.

The **E-mailed** check box field does not initially appear on the new form. If you return to this notice later, the box will be visible and unchecked. After you click the Prepare File button on the Prepare and Send E-mail form, the E-mailed check box will be checked. If you need to send a Notice again, uncheck the box on each notice that you want to resend, then go to the Prepare and Send E-mail form.

3.9.4 MONTHLY REPORT 4/4a INSTRUCTIONS

Submit Monthly - Original to Pest Exclusion, Sacramento
Copy to District Office

SECTION A: TERMINAL INSPECTIONS

Type - Inspections performed at specific terminal locations listed below:

Post Office - Includes sectional center facilities and associate post offices

UPS - United Parcel Service terminals

Federal Express - Federal Express Service terminals

Express Carriers - e.g., Airborne, DHL, Emery, Roadway, etc.

Air Freight - Airports and at destination when the means of conveyance is by air

Sea Freight - Coastal points of entry and at destination when means of conveyance is by sea

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Railroad - Inspections (primarily feed grain) when means of conveyance is rail (excludes gypsy moth)

Gypsy Moth - Residence and storage locations on articles regulated by the Federal Domestic Gypsy Moth Quarantine

Truck - Nursery stock, hay, grain, imported fire ant, seed, etc. when carried to the place of inspection by truck

Other - Any quarantine inspections that do not fit into the categories listed above. For example, an interception of illegal or infested fruit at a high-risk market. Describe under "Comments" in Section F

Premise Visits - Number of visits to a facility or destination location to conduct an inspection. Record each visit separately. For example, a visit to a van and storage facility may involve four different shipments but would still be only one premise visit

Shipments Profiled - Postal, airfreight and express carriers, etc. - total number of shipments held for inspection. This includes shipments evaluated for content and required certification, shipments actually opened and examined, and those shipments forwarded to another location for inspection.

A shipment is defined as any quantity of plant products or other regulated items from a specific shipper to a specific consignee, held for inspection during any visit to the terminal. Individual shipments are typically identified by having a bill of lading, air bill, invoice, 008, package labeling, etc. One shipping document would therefore indicate one shipment.

* For gypsy moth shipments, use this space to record the number of shipments released by phone or post card. Do not include gypsy moth shipments physically inspected.

Shipments Inspected - Postal, airfreight and express carriers, etc. - number of shipments actually opened and examined. For gypsy moth shipments, this space should be used to record the total number of shipments physically examined.

Shipments Forwarded - The number of shipments allowed proceeding to another location for inspection under warning notice (blue tag) or by compliance agreement.

For gypsy moth, include shipments that were redirected to another county.

Notice of Rejection - Total number of rejection notices written.

Pest Interceptions - Number of live pest interceptions. If more than one type of pest is found in a shipment, count each species as an interception.

Hours - Use actual hours for each category of inspection (include travel time)

TOTALS - Summation of columns

SECTION B: ORIGIN CERTIFICATION

Federal and State Phytosanitary Certificates - Certification of plant material for export

Certificate of Quarantine Compliance - Certification of interstate plant shipments

Quick Decline Permit - Certification of intrastate citrus nursery stock shipments.

Compliance Agreements - Brown Garden Snail and other compliance agreements needed to meet shipping requirements (excludes nursery stock certificates).

Other - Certification of plant material other than previously described, e.g., certificate of cleanliness, celery certification, intrastate certifications.

Number of Inspections - Phytosanitary Certificates, Certificates of Quarantine Compliance and Quick Decline Permits - number of inspections needed for the issuance of a certificate may necessitate multiple inspections per certificate issued.

Compliance agreements - number of premise inspections

Other - number of inspections

Certificates Issued - Phytosanitary Certificates, Certificates of Quarantine Compliance and Quick Decline Permits - number of certificates issued, may be multiple certificates issued per inspection.

** For Compliance Agreements, enter number of new agreements issued or renewed.

Other - number of documents issued.

Hours - Use actual hours for each category of inspection (include travel time).

TOTALS - Summation of columns.

SECTION C: FACILITIES AND PROPERTIES

Feed Grain and Screenings - Inspection of feed grain mills and storage facilities for approval status

Post Entry Properties - Facility and growing ground inspections for post entry quarantine requirements

Testing and Research - Inspections and follow-up visits for specialized facility permits

High Risk Markets - Visits to ethnic or other specialty markets to inspect for illegal host material. List any rejections or pest interceptions under "Other" in Section A and describe under "Comments" in Section F. A "Notice Of Violation" should be issued and listed in Section D.

Frequently Inspected Facilities - List the number of premises visited that are not addressed elsewhere on Report 4.

TOTALS - Summation of inspections/monitoring and hours columns.

SECTION D: ENFORCEMENT ACTION

Investigations - List individual investigations only once on a Report 4

Notice of Violations, Compliance Hearings - These are categories of escalating enforcement. Indicate the number issued/conducted.

Administrative and/or Court Actions - Applies to administrative fines (civil action) and criminal court actions. Indicate the number issued or completed.

TOTALS - Summation of number issued and total hours spent for all these actions.

SECTION E: PROGRAM SUPPORT ACTIVITIES

(Completion of this section is optional.)

Activities - Narrative section to describe

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supervisory/biologist activities and clerical support for all exclusion functions. Includes budgeting, planning, training, public relations, computerization, and other non-administrative overhead activities.

Professional - Support Activities performed by supervisors/biologists/inspectors.

Clerical - Activities performed by clerical personnel.

TOTALS - Summation of direct and support hours.

SECTION F: COMMENTS - Workload trends and appropriate explanations.

TOTAL EXCLUSION HOURS:

Field/Enforcement - Total of hours minus time spent on program support activities.

Program - Total of all hours spent on Pest Exclusion Activities.

3.8 CONTRABAND DISPOSAL

The risk of spreading pest infestations continues up to and including the final disposition of the contraband. This can include but is not limited to spoiled, discarded, or confiscated fruit fly hosts and fruit processing wastes; infested soil, potting material, and nursery stock; ballast, dunnage, shipping crates or other packing materials; and any organic or inorganic products deemed infested.

Contraband disposal can be accomplished by:

- o Autoclaving/sterilization
- o Burying (on site or in an approved landfill)
- o Burning
- o Freezing
- o Fumigation
- o Grinding
- o Irradiation

3.8 COMMODITY TREATMENT

Specific commodity treatment needs are outlined in CDFA's [Commodity Treatment Manual](#) (*login Access required!*). It is complementary to the [USDA/ APHIS/ PPQ Treatment Manual](#).